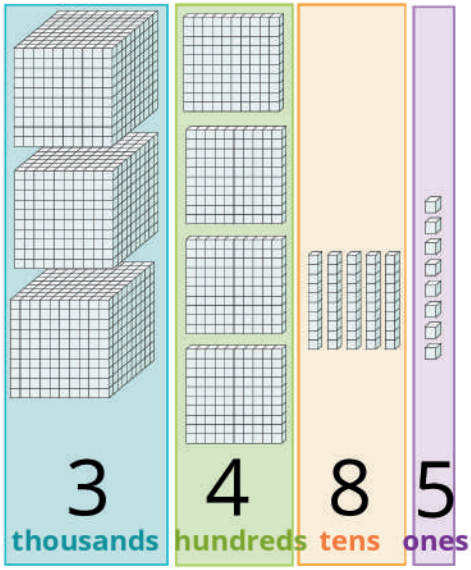
#1 Date _____

Three thousand four hundred eighty-five (3.1) ← check Level 3 Lesson 1 if you need a review

3000 + 400 + 80 + 5



All about the number 3,485:

1. How many ones are in this number? _____
2. How many hundreds are in this number? _____
3. How many thousands are in this number? _____
4. How many tens are in this number? _____
5. Which number is in the hundreds place? _____
6. Which number is in the thousands place? _____
7. Which number is in the ones place? _____

Trace the existing numbers, fill in the missing numbers and color the squares with EVEN numbers yellow. (2.4)

	510	511	512						

Complete each number sequence:

53, 54, 55, ____, ____, ____, ____, ____, ____, ____, ____

6, 9, 12, ____, ____, ____, ____, ____, ____, ____, ____

36, 33, 30, ____, ____, ____, ____, ____, ____, ____, ____

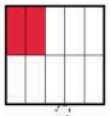
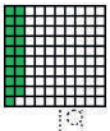
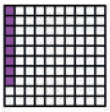
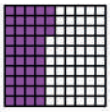
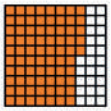
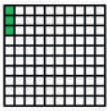
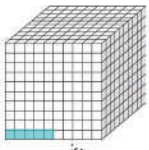
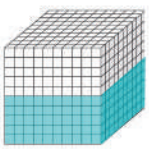
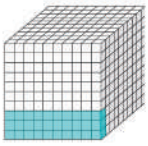
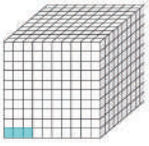
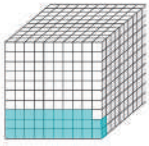
30, 28, 26, ____, ____, ____, ____, ____, ____, ____, ____

84, 77, 70, ____, ____, ____, ____, ____, ____, ____, ____

7, 14, 21, ____, ____, ____, ____, ____, ____, ____, ____

#2 Date _____

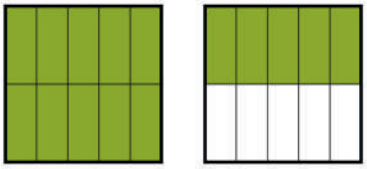
Identify each shaded part using a fraction, a decimal and words.

				
$\frac{2}{10}$				
0.2				
two tenths				
				
$\frac{19}{100}$				
0.19	0.08			
nineteen hundredths				
				
$\frac{5}{1000}$				
0.005			0.003	0.029
five thousandths				

Name each number out loud, then use your place value chart to help you write the value of the 2 in each number:

51324	5132.4	513.24	51.324	21354
20		$\frac{2}{10}$		
92873	9287.3	928.73	92.873	93.872
2000				

Write each fraction as a:



mixed number: $1\frac{5}{10}$

decimal: 1.5

word form: one and five tenths

mixed number: _____

decimal: _____

word form: _____

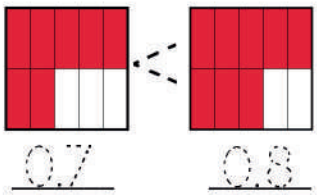
What is the sum of two hundred thirty-five and seven hundred sixty-five?

Your piano recital had 10 rows, each with 14 seats. How many seats were there?

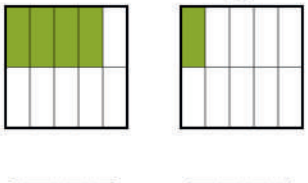
You need to finish the remaining 175 pages of your library book before it's due in 7 days. How many pages should you read each day?

Uh, oh. You and three buddies broke the neighbor's window with a baseball. It will cost $624 to replace. How much should each of you pay?

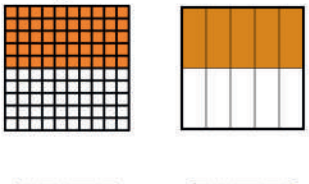
Name the decimals then compare them using the comparison symbols (<, >, =)



0.7 < 0.8

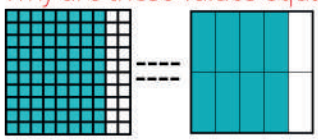


_____ _____

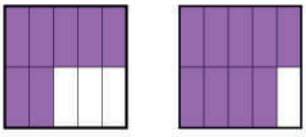


_____ _____

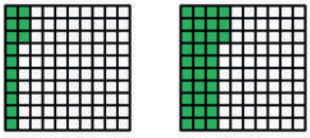
Why are these values equal?



0.80 = 0.8



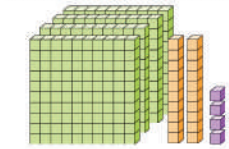
_____ _____



_____ _____

#3 Date _____

What numbers do these base ten blocks represent? Write each in expanded form and word form.

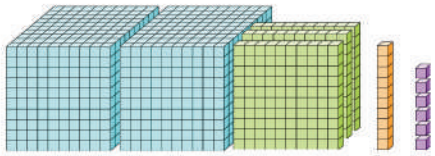


4 2 4

hundreds tens ones

(4x100)+(2x10)+(4x1)

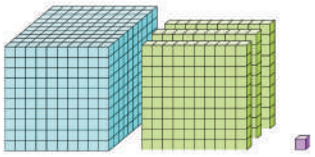
four hundred twenty-four



thousands hundreds tens ones

_____

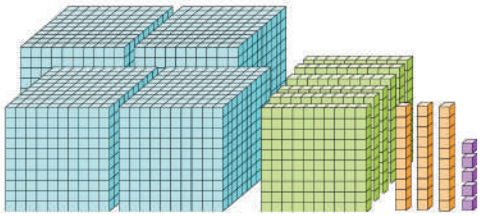
_____



thousands hundreds tens ones

_____

_____



thousands hundreds tens ones

_____

_____

Use your place value chart to fill in the blanks in this table.

Word Form	Expanded Form	Standard Form
Twelve thousand, six hundred two	(1x10,000)+(2x1000)+(6x100)+(2x1)	12,602
Nine million, thirteen thousand		9,013,000
		10,015
	(5x10,000) + (9x1000)	
Forty-three million, fifty thousand, nineteen		

A chocolate factory makes the following amounts of each flavor, based on popularity. Use the tables below to answer the questions. (3.24) ← check Level 3 lesson 24 if you need a review

Flavor	Amount
Raspberry	102,624
Coconut	98,128
Hazelnut	154,042
Vanilla	63,100
Mint	126,200

Which flavor is the most popular? _____

Which flavor is the least popular? _____

Which flavor is twice as popular as vanilla? _____

How many chocolates does the factory make altogether?

_____

How many more hazelnut chocolates than raspberry chocolates does the factory make? _____

Put these numbers in order from smallest to largest. (3.2)

475 547 745 457

_____ _____ _____ _____
smallest largest

980 890 809 908

_____ _____ _____ _____
smallest largest

132 123 312 213 231

_____ _____ _____ _____ _____
smallest largest

561 165 156 615

_____ _____ _____ _____
smallest largest

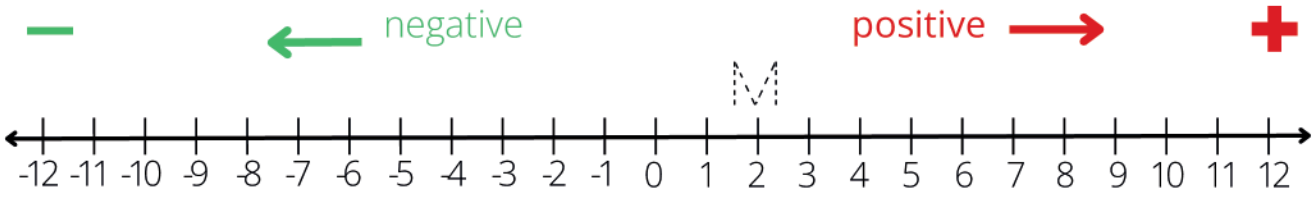
Write operators (x, ÷,+, -) in all of the empty squares to make each number sentence true. Remember to apply the Order of Operations, PEMDAS. (3.83)

6	÷	2	x	3	=	1
5		2		4	=	3
1		1		2	=	4
=		=		=		=
2		4		6	=	12

5	x	2	---	6	=	4
4		1		2	=	3
0		2		1	=	1
=		=		=		=
5		1		3	=	1

7	x	1	---	1	=	6
3		1		1	=	3
2		1		1	=	2
=		=		=		=
1		3		3	=	9

#4 Date _____



Write each letter at the given point on the number line:

M at 2	E at 11	U at -11	R at 12	D at 9
O at 10	E at -9	O at -3	U at -11	S at -12
C at -5	T at 4	E at -9	O at -3	L at -2
A at 3	O at -4	T at 4	H at 5	
P at -10	R at 12	O at -4	R at -8	

Use words to write $3\frac{7}{10}$ _____

Use words to write 3.7 _____

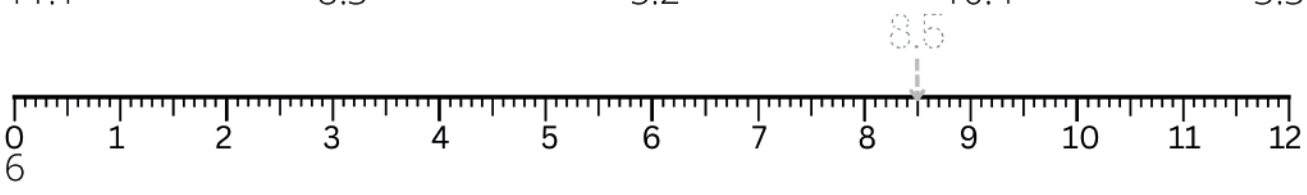
To which decimal number does each arrow point?

a 0.5 c _____ e _____ g _____ i _____

b _____ d _____ f _____ h _____ j _____

Draw arrows to each decimal number and label them with the number.

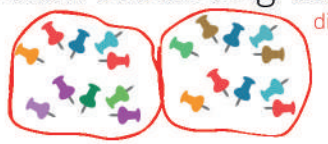
8.5	2.7	7.6	6.9	4.8
11.1	8.3	5.2	10.4	3.3



6

Draw circles to group the items, then complete the equations. (4.16)

divide 20 into 2 equal groups, how many are in each group?



$\frac{20}{2} = 10$ $20 \div 2 =$ $2\overline{)20}$ What is 1/2 of 20?

$\frac{20}{4} =$ $20 \div 4 =$ $4\overline{)20}$ What is 1/4 of 20?

$\frac{20}{5} =$ $20 \div 5 =$ $5\overline{)20}$ What is 1/5 of 20?

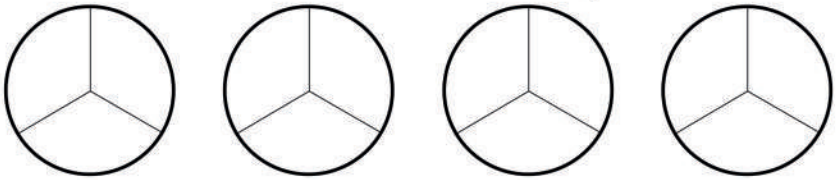
quantity means parentheses (6 + 3)

WORD PROBLEMS

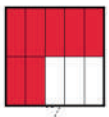
What is twice the quantity of six and three? $2(6+3) =$

What is one fifth of thirty?

Shade circles to show that $3\frac{1}{3}$ equals $\frac{10}{3}$.



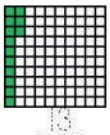
Identify each shaded part using a fraction, a decimal and words. (4.34)



$\frac{7}{10}$

0.7

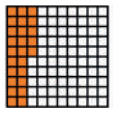
seven tenths

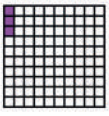


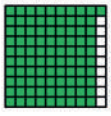
$\frac{13}{100}$

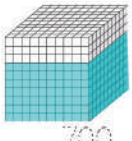
0.13

thirteen hundredths





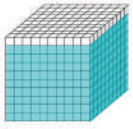


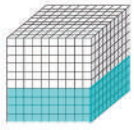


$\frac{700}{1000}$

0.700

seven hundred thousandths





#5 Date _____

Rounding Steps:

1. Circle the digit in the place to which you are rounding.
2. If the next digit to the right is 4 or less let your circled digit rest. If it's 5 or more, let your circled digit soar one number higher.
3. Make all digits to the right of the circled digit zeros.

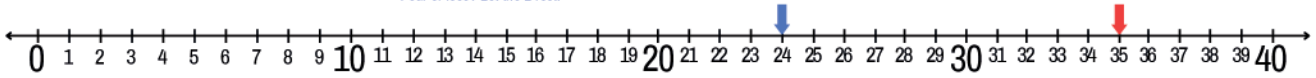
Round to the nearest TEN:

35 ___ Five or more? Let the 5 soar – round UP to 40.

24 ___ Four or less? Let the 2 rest.

19 _____

13 _____



Round to the nearest HUNDRED:

245 ___ Four or less? Let the 2 rest.

119 ___ Four or less? Let the 1 rest.

275 _____

349 _____

254 ___ Five or more? Let the 2 soar (round UP to 3).

189 _____

395 _____

208 _____

Round to the nearest THOUSAND:

1499 ___ Four or less? Let the 1 rest.

1586 _____

146 ___ Four or less? Let the 0 rest.

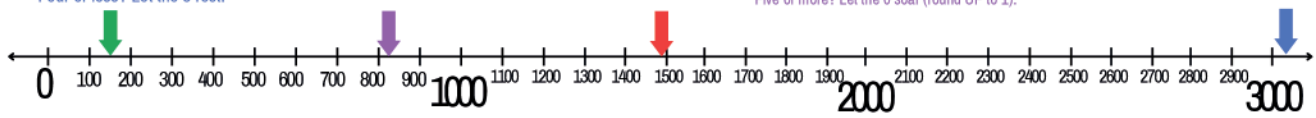
1433 _____

3050 ___ Four or less? Let the 3 rest.

2059 _____

817 ___ Five or more? Let the 0 soar (round UP to 1).

1649 _____



1 5 0 1
thousands hundreds tens ones

Round to the nearest TEN _____

Round to the nearest HUNDRED _____

Round to the nearest THOUSAND _____

_ 9 4 7
thousands hundreds tens ones

Round to the nearest TEN _____

Round to the nearest HUNDRED _____

Round to the nearest THOUSAND _____

3 2 1 7
thousands hundreds tens ones

Round to the nearest TEN _____

Round to the nearest HUNDRED _____

Round to the nearest THOUSAND _____

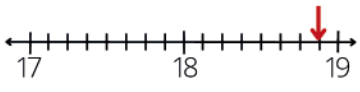
2 1 0 3
thousands hundreds tens ones

Round to the nearest TEN _____

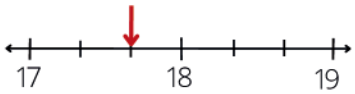
Round to the nearest HUNDRED _____

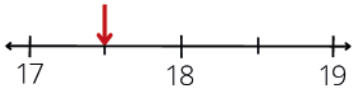
Round to the nearest THOUSAND _____

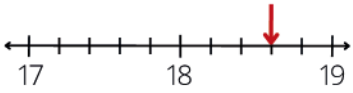
To which mixed number does each arrow point? Round to the nearest whole number.



18 7/8 19







Each group contains two truths and a lie. Circle the LIE in each group. Follow the order of operations. (PEMDAS) (3.83)

 = 5  = 7  = 8  = 12

45 -  x  = 

 x  -  x  = 4

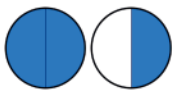
 +  +  +  = 33

( + ) ÷  = 3

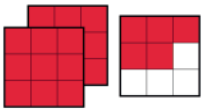
 -  ÷  = 6

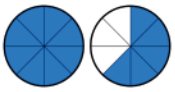
 x  =  x 

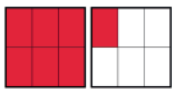
Name these fractions as mixed numbers and improper fractions. (4.25)

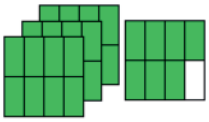


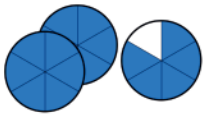
1/2 3/2

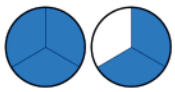


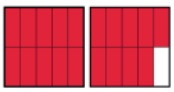


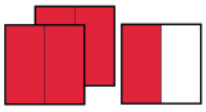


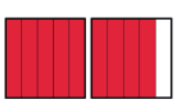


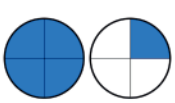


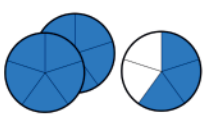












#6 Date _____

hundreds	tens	ones	tenths	hundredths	thousandths
		1.	3	1	5

One and three hundred fifteen thousandths

Round to the nearest ONE _____

Round to the nearest TENTH _____

Round to the nearest HUNDREDTH _____

hundreds	tens	ones	tenths	hundredths	thousandths
2	1.	5	8	1	

Twenty-one and five hundred eighty-one thousandths

Round to the nearest ONE _____

Round to the nearest TENTH _____

Round to the nearest HUNDREDTH _____

hundreds	tens	ones	tenths	hundredths	thousandths
1	3.	4	5	6	

Thirteen and four hundred fifty-six thousandths

Round to the nearest ONE _____

Round to the nearest TENTH _____

Round to the nearest HUNDREDTH _____

hundreds	tens	ones	tenths	hundredths	thousandths
		9.	7	0	6

Nine and seven hundred six thousandths

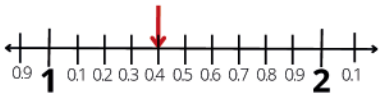
Round to the nearest ONE _____

Round to the nearest TENTH _____

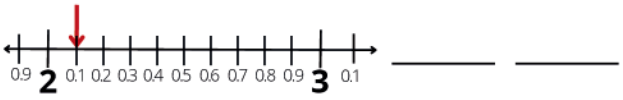
Round to the nearest HUNDREDTH _____

To which decimal does each arrow point? Round to the nearest whole number.

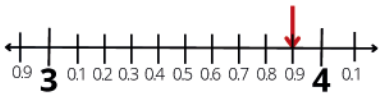
2.7 3



_____ _____

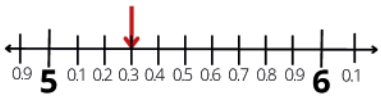


_____ _____



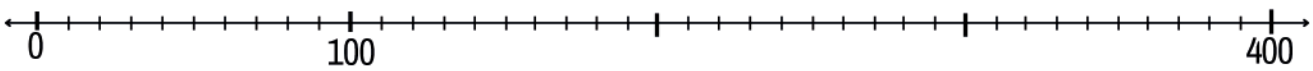
_____ _____

_____ _____

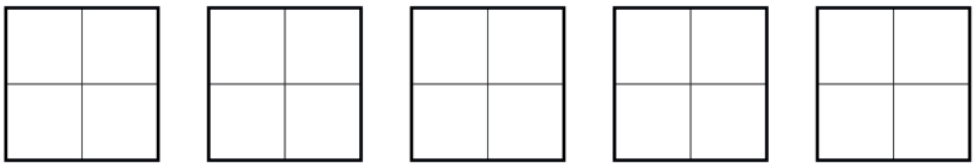


_____ _____

Draw a dot at 300 and label it.



Shade these squares to show that $4\frac{1}{2}$ equals $\frac{18}{4}$. (4.25)



Write the missing operator (+, -, x, ÷) in empty squares to make each number sentence true. Remember to apply the Order of Operations, PEMDAS. (4.30)

6^2	-	4		4	-	10	=	10
15	+	5	-	20		2	=	10
2	+	4		2		8	=	3

5		3	-	30		2	=	0
3		6		9	-	2	=	0
5		4	-	5		2	=	10

Find the products. (4.59)

$$\begin{array}{r} 204 \\ \times\ 18 \\ \hline 1632 \\ +2040 \\ \hline 3672 \end{array}$$

8x204

10x204

$$\begin{array}{r} 154 \\ \times\ 21 \\ \hline \end{array} \qquad \begin{array}{r} 119 \\ \times\ 32 \\ \hline \end{array} \qquad \begin{array}{r} 143 \\ \times\ 28 \\ \hline \end{array} \qquad \begin{array}{r} 211 \\ \times\ 24 \\ \hline \end{array}$$

Find the quotients. (4.60)

$$13\overline{)221} \qquad 19\overline{)475} \qquad 16\overline{)496} \qquad 18\overline{)522} \qquad 15\overline{)225}$$

$$21\overline{)567} \qquad 27\overline{)729} \qquad 23\overline{)805} \qquad 14\overline{)434} \qquad 17\overline{)272}$$

#7 Date _____

	tens	ones	tenths	hundredths
	1	3.	0	0
+		8.	0	0
	2	1.	0	0

	tens	ones	tenths	hundredths
	1	5.	5	0
+	1	1.	5	0

	tens	ones	tenths	hundredths
	2	5.	8	0
+	3	2.	6	0

	tens	ones	tenths	hundredths
	4	5.	2	5
+	3	6.	7	5

WORD PROBLEMS

What is five times the quantity of three plus two? $5(3+2)$

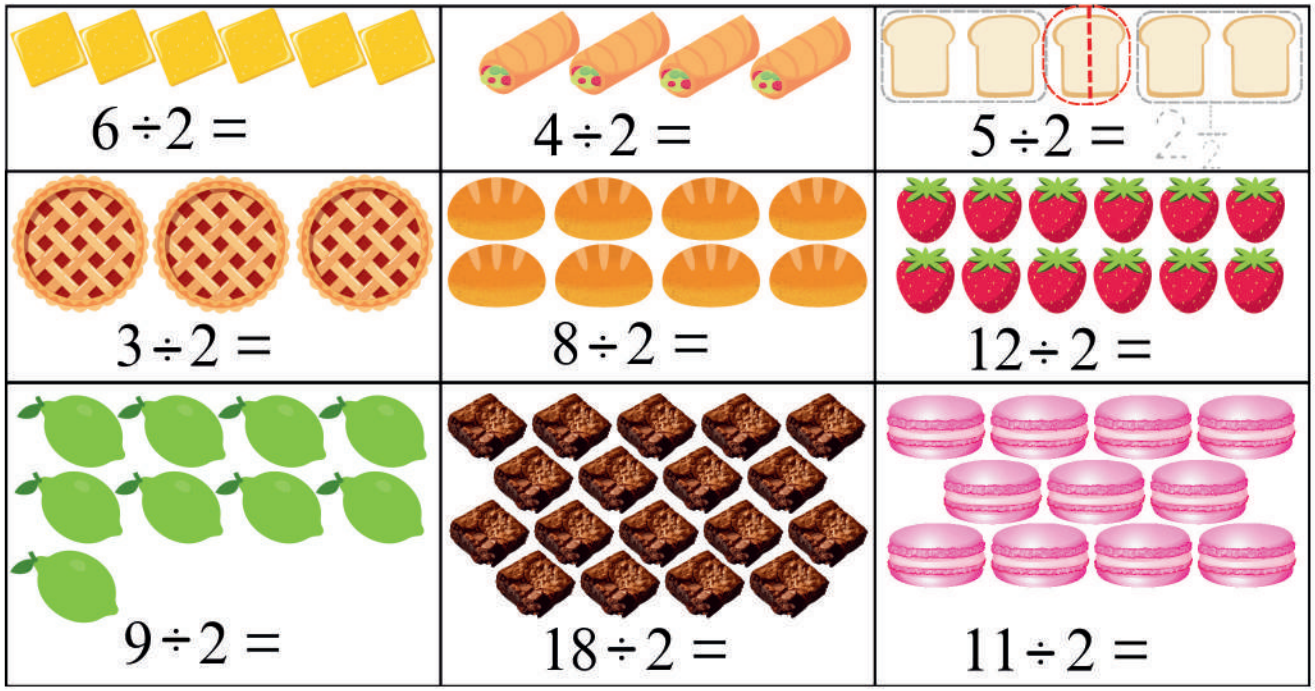
quantity means parentheses (3 + 2)

Four squared is how much more than the square root of 36?

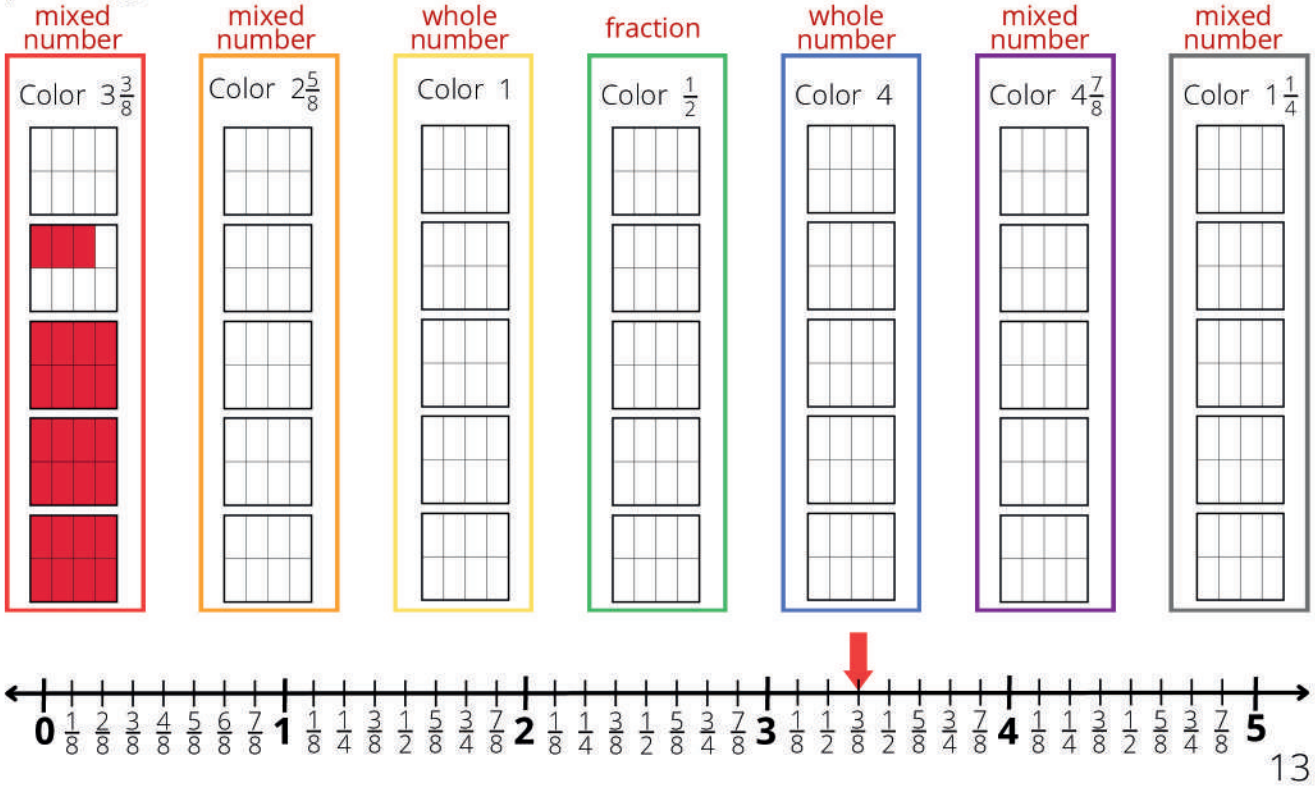
Draw a line from each number to its type:

$1\frac{1}{4}$	mixed number	$\frac{1}{2}$
3	whole number	$2\frac{1}{8}$
$\frac{7}{8}$	fraction	4
2	improper fraction	$\frac{25}{8}$
$3\frac{3}{8}$		$\frac{3}{4}$

Draw lines to divide each set into equal halves. If there is a leftover, circle it in red, then use a vertical line to cut it in half.



Color the number in each colored rectangle. Then draw an arrow that color pointing to the number on the number line below. (3.16)



#8 Date _____

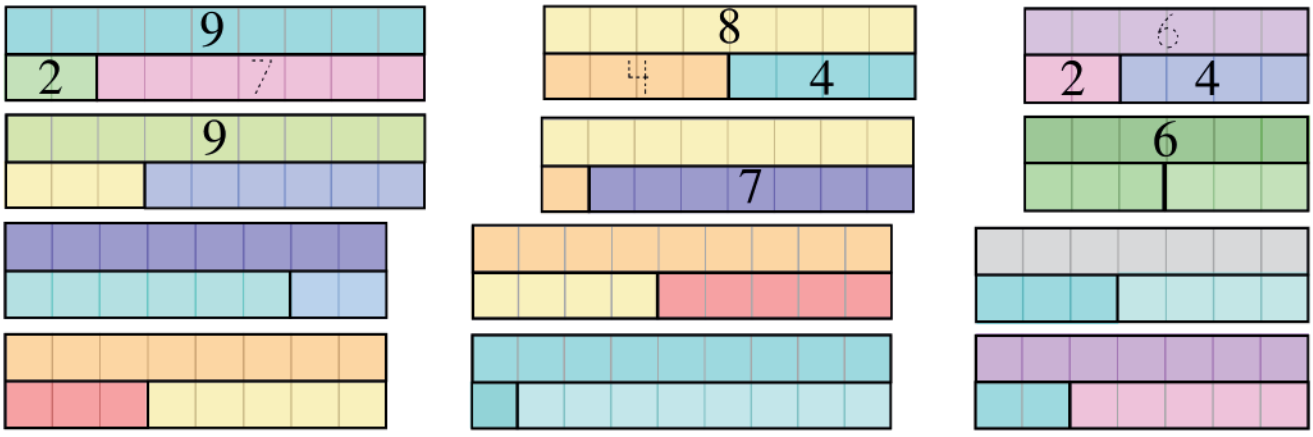
Find the sums and differences without regrouping.

42 + 16	35 + 24	21 + 37	15 + 44	33 + 12
26 - 14	38 - 23	41 - 20	19 - 16	57 - 24

Find the sums and differences with regrouping.

247 + 163	185 + 245	215 + 95	1448 + 585	1629 + 2586
220 - 193	185 - 156	301 - 178	2510 - 1633	1821 - 1257

Find the missing PART and/or WHOLE in each addition fact family.

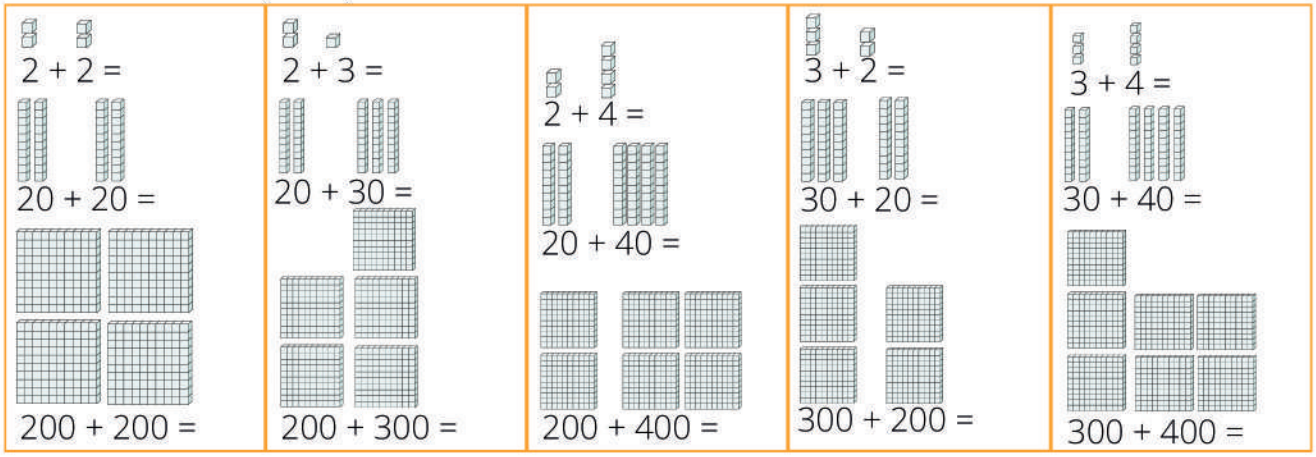


Find the sums and differences. Line up the decimals!

142.3 - 98.57 37.94 + 12.37 72 - 29.01

142.30
- 98.57

Find the sums. (2.10)



Find the sums. (2.10)

4 + 5 = _____ 6 + 3 = _____ 5 + 6 = _____

40 + 50 = _____ 60 + 30 = _____ 50 + 60 = _____

400 + 500 = _____ 600 + 300 = _____ 500 + 600 = _____

4000 + 5000 = _____ 6000 + 3000 = _____ 5000 + 6000 = _____

Trace the existing numbers, fill in the missing numbers and color the squares with EVEN numbers yellow. (2.4)

					1002			1005	

#9 Date _____

Find the missing numbers to complete each equation.

314 + ☐ = 395	☐ + 112 = 235	175 + ☐ = 343	☐ + 218 = 348	301 + ☐ = 419
65 ← Whole − ☐ ← Part = 28 ← Part	☐ ← Whole − 29 ← Part = 102 ← Part	140 − ☐ = 115	☐ − 32 = 127	224 − ☐ = 78

Rearrange the subtraction problems above if you need to.

65 ← Whole
−28 ← Part
= ☐ ← Part

102 ← Part
+29 ← Part
= ☐ ← Whole

Find the value of X in each equation and write it in the box below.

114 + X = 228	X + 83 = 189	106 + X = 158	X + 125 = 236	571 + X = 300
X= ____	X= ____	X= ____	X= ____	X= ____

93 ← Whole − X ← Part = 16 ← Part	X ← Whole − 29 ← Part = 93 ← Part	163 − X = 85	X − 144 = 151	228 − X = 99
X= ____	X= ____	X= ____	X= ____	X= ____

Rearrange the subtraction problems above if you need to.

93 ← Whole
−16 ← Part
= ☐ ← Part

93 ← Part
+29 ← Part
= ☐ ← Whole

Draw a number line with whole numbers marked and numbered from 0 to 10. Then mark ½ in between each whole number. Draw an arrow to 3 1/2.

Write these sentences using digits and operator symbols:

Forty-five is less than fifty-four

45 < 54

Twelve more than fifteen is twenty-seven

Seventeen, twice, is thirty-four

Ten, four times, is forty

Forty minus fourteen equals twenty-six

Two hundred twenty-one is greater than two hundred twelve

Trace then write each term, then draw a line to match each term to its definition. (3.59)

coefficient

variable

- A letter or symbol that represents a number.
- A number in front of a variable. It gets multiplied by the variable.

coefficient variable

$5A = 20$ (A = 4)

Math Rule:
When you have a VARIABLE and a COEFFICIENT together in a number sentence, they are multiplied together. You don't need a multiplication symbol.

Fill in the missing factors or products to complete each number sentence.

5 x ☐ = 15

3 x ☐ = 6

4 x ☐ = 16

7 x ☐ = 21

6 x ☐ = 36

Find the value of the VARIABLE in each number sentence.

See? No multiplication symbol between the variable and the coefficient!

Color the COEFFICIENTS red and the VARIABLES green in these number sentences.

5X = 15	X = ____
3Y = 6	Y = ____
4Z = 16	Z = ____
7A = 21	A = ____
6B = 36	B = ____

#10 Date_____

Write a number sentence for each box as repeated addition then multiplication.

Each toy has four rings. How many rings do you have?

4 + 4 + ___ + ___ + ___ = ____ ← repeated addition

5 (number of toys) X 4 (rings per toy) = ____ ← multiplication

Each carton has twelve eggs. How many eggs do you have?

12 + 12 + ___ + ___ + ___ + ___ = ____ ← repeated addition

____ (number of cartons) X ____ (eggs per carton) = ____ ← multiplication

Rewrite each repeated addition sentence as a multiplication equation.

7 + 7 + 7 ____7 x 3 = 21____

8 + 8 + 8 + 8 + 8 + 8 + 8 _____

9 + 9 + 9 + 9 _____

Your mom has seven hundred five dollars and seventy-nine cents. She buys a laptop for three hundred forty-five dollars and ninety-nine cents. How much money does she have left?

Find the products.

28 x 6	32 x 8	19 x 3	22 x 9	35 x 4	42 x 5

25 x12	45 x13	27 x21	33 x15	28 x14	22 x18
50 (2x25)	3x45	1x27	5x33	4x28	
+250 (10x25)	10x45	20x27	10x33	10x28	
300					

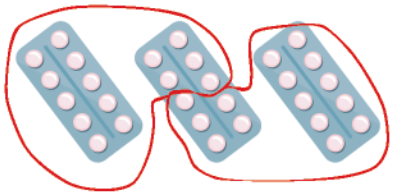
Draw circles to group the items, then complete the equations. (4.16)

$\frac{30}{10} =$ $30 \div 10 =$ $10\overline{)30}$ What is 1/10 of 30?

What is 2/10 of 30?

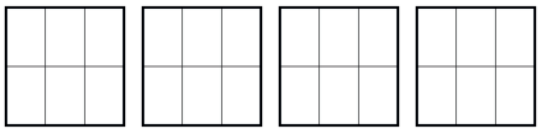
$\frac{30}{5} =$ $30 \div 5 =$ $5\overline{)30}$ What is 1/5 of 30?

What is 2/5 of 30?

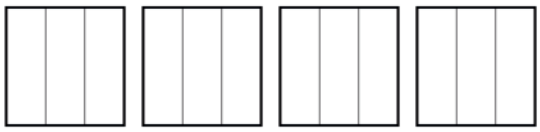


$\frac{30}{2} =$ 15 $30 \div 2 =$ 15 $2\overline{)30}$ 15 What is 1/2 of 30? 15

Shade to show that $3\frac{1}{6}$ equals $\frac{19}{6}$.



Shade to show that $3\frac{2}{3}$ equals $\frac{11}{3}$.



Change mixed numbers to improper fractions.

The denominator of the improper fraction is the same as the denominator of the fractional part of the mixed number, because the PIECES are the same size.

To find the numerator of the improper fraction:

1. Multiply the denominator of the fraction by the whole number.
2. Add the numerator of the fraction.

add

$3\frac{1}{6}$ 6 x 3 = 18, 18 + 1 = 19 $\frac{19}{6}$

multiply

$4\frac{1}{6} =$ ____ $2\frac{7}{8} =$ ____

$1\frac{3}{4} =$ ____ $4\frac{3}{5} =$ ____

$5\frac{1}{2} =$ ____ $3\frac{1}{3} =$ ____

$2\frac{2}{3} =$ ____ $3\frac{1}{4} =$ ____

Find the value of the VARIABLE in each number sentence. (3.59)

coefficient variable

Color the COEFFICIENTS red and the VARIABLES green in these number sentences.

4X = 12	X = 3	6A = 42	A = ____
7Y = 56	Y = ____	8B = 48	B = ____
8Z = 40	Z = ____	7C = 84	C = ____
6A = 36	A = ____	8X = 96	X = ____
9B = 72	B = ____	5Y = 60	Y = ____

#11 Date_____

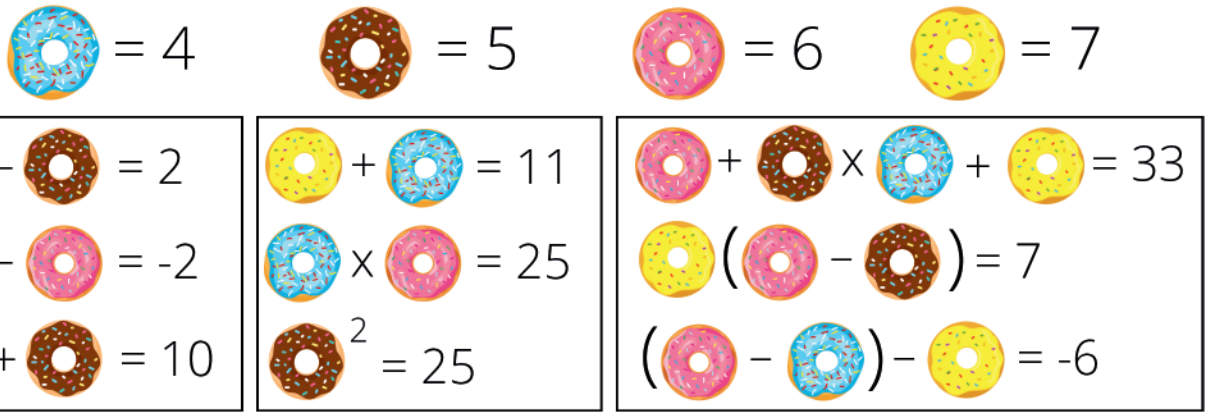
Find the missing factors.

☐ x 6 = 42	7 x ☐ = 63	☐ x 8 = 64
7 x ☐ = 28	☐ x 6 = 72	6 x ☐ = 54
☐ x 9 = 72	8 x ☐ = 40	☐ x 7 = 49

What fraction of the number sentences above have an ODD product?
(There are nine number sentences, so that will be the denominator of both fractions)

What fraction of the number sentences above have an EVEN product?

Each group contains two truths and a lie. Circle the LIE in each group. Follow the order of operations (PEMDAS). (3.83)



Complete these Multiplication Fact Family houses. (2.36)

Find the products.

147
x22
294 2x147
+2940 20x147
3234

232
x14
4x232
10x232

157
x19
9x157
10x157

495
x21

298
x16

329
x18

140
x132
280 2x140
4200 30x140
+14000 100x140
18480

204
x120
0x204
20x204
100x204

256
x143

310
x105

227
x186

WORD PROBLEMS

Five twice is how much less than five squared?

What is three more than the square root of forty-nine?

When two symbols are together in a number sentence:
Two positives make a positive. ++ = +
A positive and a negative make a negative. +- = -
A negative and a positive make a negative. -+ = -
Two negatives make a positive. -- = +

Use the number line to find each sum or difference. (3.58)

8 - 4 = ____

4 - 8 = ____

-4 - 8 = ____

-4 + 8 = ____

4 + 19 = ____

22 - 12 = ____

-1 - 9 = ____

-10 + 9 = ____

2 - 15 = ____

14 - 18 = ____

two negatives together make a positive

-3 - -9 = ____

0 + -5 = ____

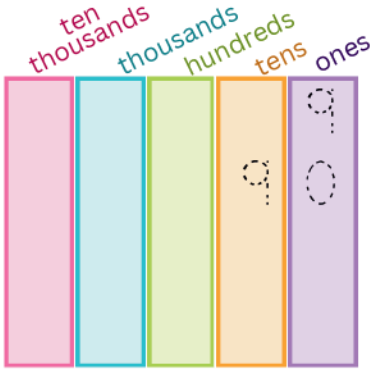
#12 Date_____

9 x 1 =

9 x 10 =

9 x 100 =

9 x 1000 =

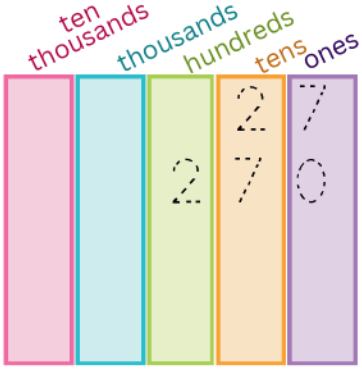


9 x 3 =

9 x 30 =

9 x 300 =

9 x 3000 =

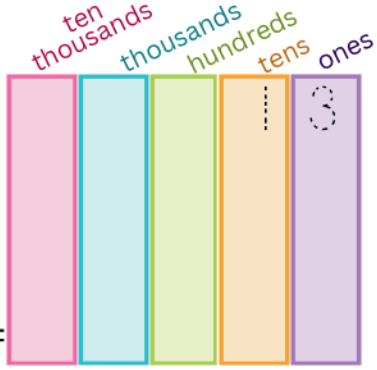


13 x 1 =

13 x 10 =

13 x 100 =

13 x 1000 =

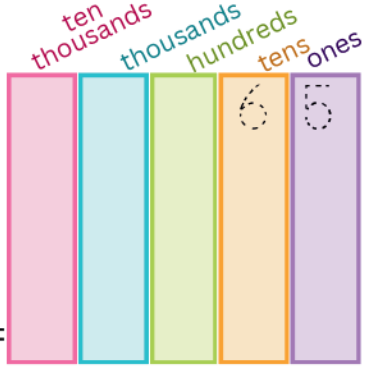


13 x 5 =

13 x 50 =

13 x 500 =

13 x 5000 =

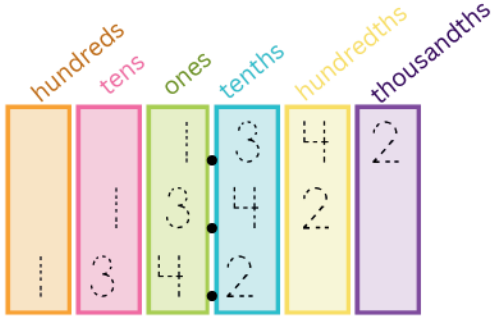


1.342

x1 =

x10 =

x100 =

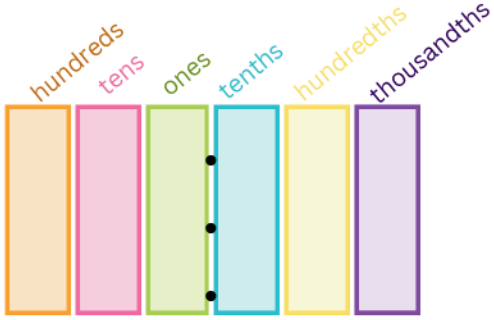


4.519

x1 =

x10 =

x100 =



Find the products.

18 x 10 = _____

18 x 100 = _____

18 x 1000 = _____

18 x 20 = _____

18 x 200 = _____

18 x 2000 = _____

2.154 x 10 = _____

2.154 x 100 = _____

2.154 x 1000 = _____

52.13 x 10 = _____

52.13 x 100 = _____

52.13 x 1000 = _____

Convert improper fractions (top heavy) to mixed numbers. (4.25)

$\frac{21}{8} = 2\frac{5}{8}$

To convert:

1.Divide the numerator by the denominator. 21 ÷ 8 = 2 with 5 leftover.

2. The numerator of the fraction part of the mixed number is the remainder. 25-16=5

3. The size of the pieces, the denominator of the fractional part, remains the same.

$\frac{15}{2} =$ $\frac{17}{3} =$ $\frac{13}{4} =$

$\frac{25}{4} =$ $\frac{10}{3} =$ $\frac{13}{2} =$

$\frac{13}{6} =$ $\frac{17}{5} =$ $\frac{13}{7} =$

Draw lines to match each quadrilateral to it's most specific name. (3.48)

square rhombus trapezoid rectangle parallelogram

Complete the charts. (4.78)

1	I	11	
2	II	12	
3	III	13	
4	IV	14	
5	V	15	
6		16	
7		17	
8		18	
9		19	
10	X	20	XX

Write the Arabic Number for each Roman Numeral.

XXIX _____ XCIX _____

LXIV _____ D _____

LXXIX _____ CD _____

XXXII _____ LXXIV _____

XXXIX _____ M _____

XLV _____ CM _____

XLVI _____ MCXI _____

#13 Date_____

Find the products. Round each factor and estimate the product of each problem.

$$\begin{array}{r} 29 \\ \times 11 \\ \hline 29 \\ +290 \\ \hline 319 \end{array}$$ 1x29, 10x29

Round both factors to estimate the product.

$30 \times 10 = 300$

Is it reasonable?

$$\begin{array}{r} 41 \\ \times 19 \\ \hline \end{array}$$ 9x41, 10x41

Round both factors to estimate the product.

$\times$ _____

Is it reasonable?

$$\begin{array}{r} 32 \\ \times 38 \\ \hline \end{array}$$

Round both factors to estimate the product.

$\times$ _____

Is it reasonable?

$$\begin{array}{r} 31 \\ \times 12 \\ \hline 62 \\ +310 \\ \hline 372 \end{array}$$ 2x31, 10x31

$$\begin{array}{r} 24 \\ \times 15 \\ \hline \end{array}$$ 5x24, 10x24

$$\begin{array}{r} 37 \\ \times 23 \\ \hline \end{array}$$ 3x37, 20x37

$$\begin{array}{r} 53 \\ \times 18 \\ \hline \end{array}$$ 8x53, 10x53

$$\begin{array}{r} 25 \\ \times 24 \\ \hline \end{array}$$ 4x25, 20x25

Estimated Product:

$30 \times 10 = 300$ $20 \times 20 = 400$

Fill in the blanks to complete each chart.

	x 10	x 100	x 1000
5	50	500	5000
3			
9			

	x 40	x 400	x 4000
5			
3			
9			

$$\begin{array}{r} 30 \\ \times 40 \\ \hline 1200 \end{array}$$ two zeros

$$\begin{array}{r} 300 \\ \times 400 \\ \hline 120000 \end{array}$$ four zeros

$$\begin{array}{r} \$7.00 \\ \times 40 \\ \hline \$280.00 \end{array}$$ three zeros, two behind a decimal

You can multiply big numbers in your head? You must be a genius!

Multiply mentally.

$$\begin{array}{r} 20 \\ \times 30 \\ \hline \end{array} \quad \begin{array}{r} 80 \\ \times 80 \\ \hline \end{array} \quad \begin{array}{r} 50 \\ \times 40 \\ \hline \end{array} \quad \begin{array}{r} 90 \\ \times 20 \\ \hline \end{array} \quad \begin{array}{r} 70 \\ \times 40 \\ \hline \end{array} \quad \begin{array}{r} 60 \\ \times 50 \\ \hline \end{array}$$

$$\begin{array}{r} 500 \\ \times 60 \\ \hline \end{array} \quad \begin{array}{r} 600 \\ \times 30 \\ \hline \end{array} \quad \begin{array}{r} 200 \\ \times 90 \\ \hline \end{array} \quad \begin{array}{r} 300 \\ \times 200 \\ \hline \end{array} \quad \begin{array}{r} 200 \\ \times 400 \\ \hline \end{array} \quad \begin{array}{r} 900 \\ \times 400 \\ \hline \end{array}$$

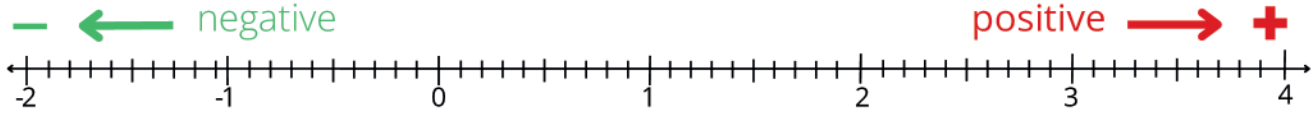
Find the value of the letter in each number sentence.

$5X = 20$	$X =$ ____	$A - 7 = 14$	$A =$ ____
$Y + 3 = 23$	$Y =$ ____	$7B = 49$	$B =$ ____
$15 - Z = 10$	$Z =$ ____	$2^2 + C = 14$	$C =$ ____

Find the products.

52 x 4	39 x 6	87 x 8	317 x 3	598 x 9	454 x 7
36 x14 = 504 (4x36, 10x36)	58 x25 (5x58, 20x58)	46 x31 (1x46, 30x46)	37 x23 (3x37, 20x37)	28 x37 (7x28, 30x28)	57 x18
119 x34 = 4046 (4x119, 30x119)	277 x26	318 x19	480 x14	194 x28	249 x23

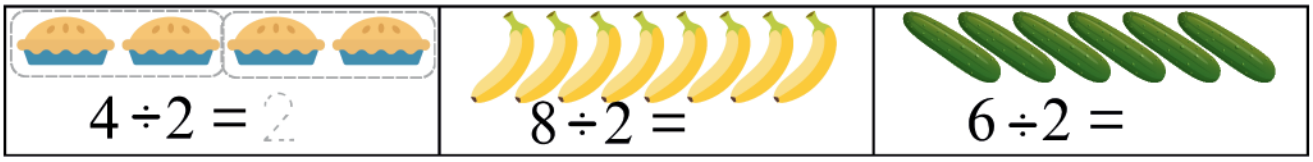
Use the number line to find each sum or difference. (3.58)



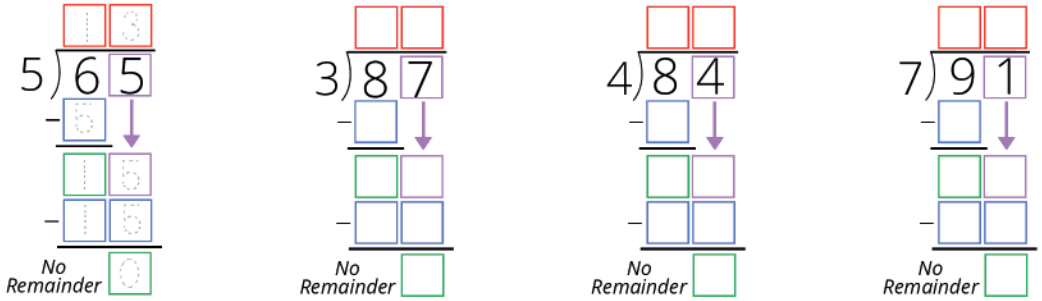
$1 - 2.5 = -1.5$	$-1 + 2.5 =$ ____	$-2 + 3.2 =$ ____
$3 - 1.5 =$ ____	$-1 - 1.3 =$ ____	$1 + 1.8 =$ ____
$2.1 - 1.1 =$ ____	$-1.1 + 2.1 =$ ____	$1.3 + 1.7 =$ ____
$3.5 - 1.5 =$ ____	$1 + 2.4 =$ ____	$1.5 + 1.5 =$ ____

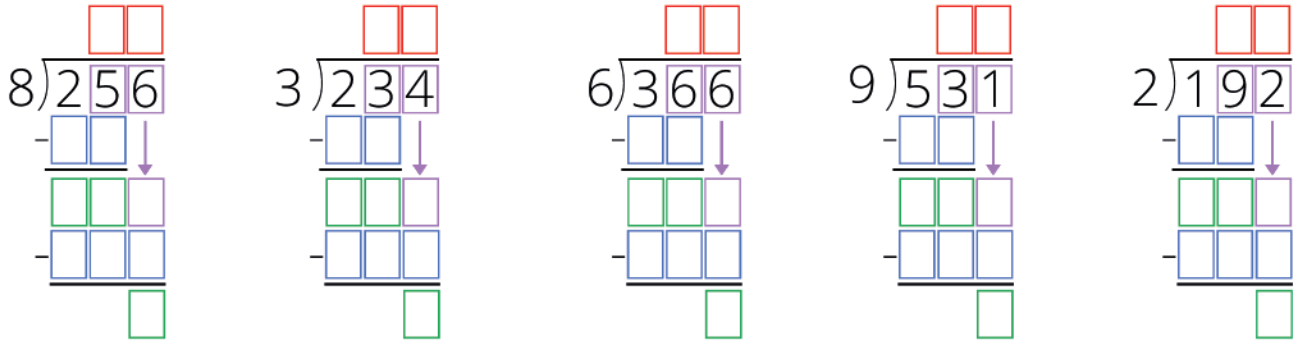
#14 Date_____

Draw lines to divide each set into equal halves.

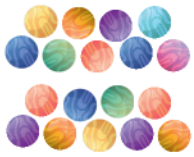


Divide.
Multiply.
Subtract.
Bring Down.
Repeat.





Draw circles to group the items, then complete the equations. (4.16)



$\frac{18}{9} =$ 18 ÷ 9= $9\overline{)18}$

What is 1/9 of 18?

What is 2/9 of 18?

$\frac{18}{6} =$ 18 ÷ 6= $6\overline{)18}$

What is 1/6 of 18?

What is 5/6 of 18?

$\frac{18}{3} =$ 18 ÷ 3= $3\overline{)18}$

What is 1/3 of 18?

What is 2/3 of 18?

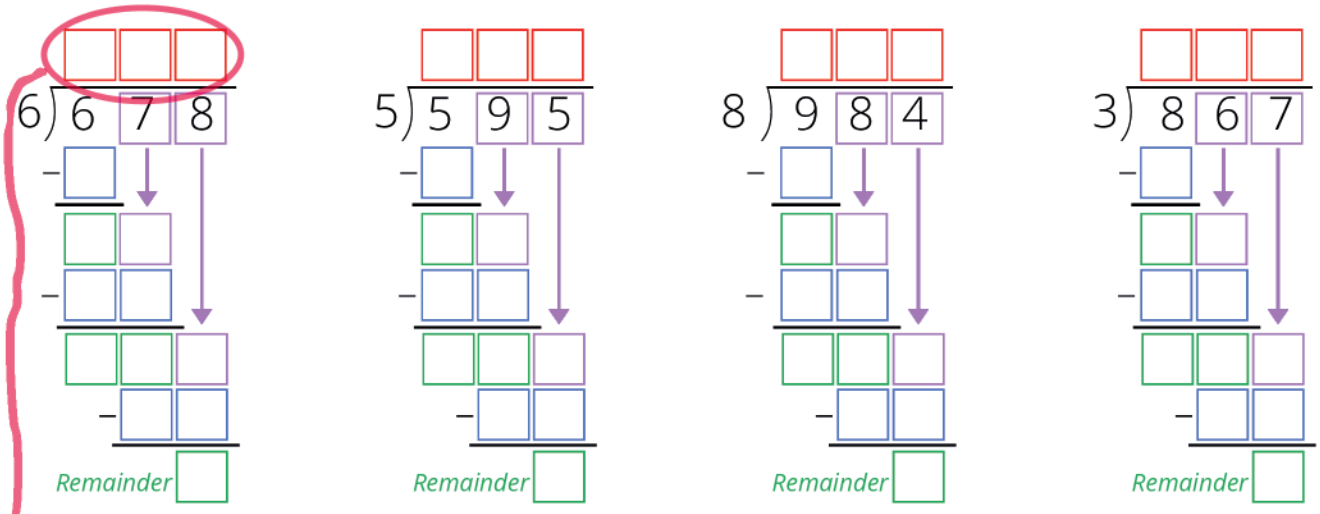
Think of an even number. Multiply it by 5. What number is the last digit of the product? Try it again with a different even number.

If this is morning, what time will it be in 3 hours and 20 minutes?

Find the missing numbers in each number sentence.

		2	x		x	4	=	24
		x		x		x		
2	x	2	=					
		x		x		=		
			x		=	28		
		=		=				
		16		84				

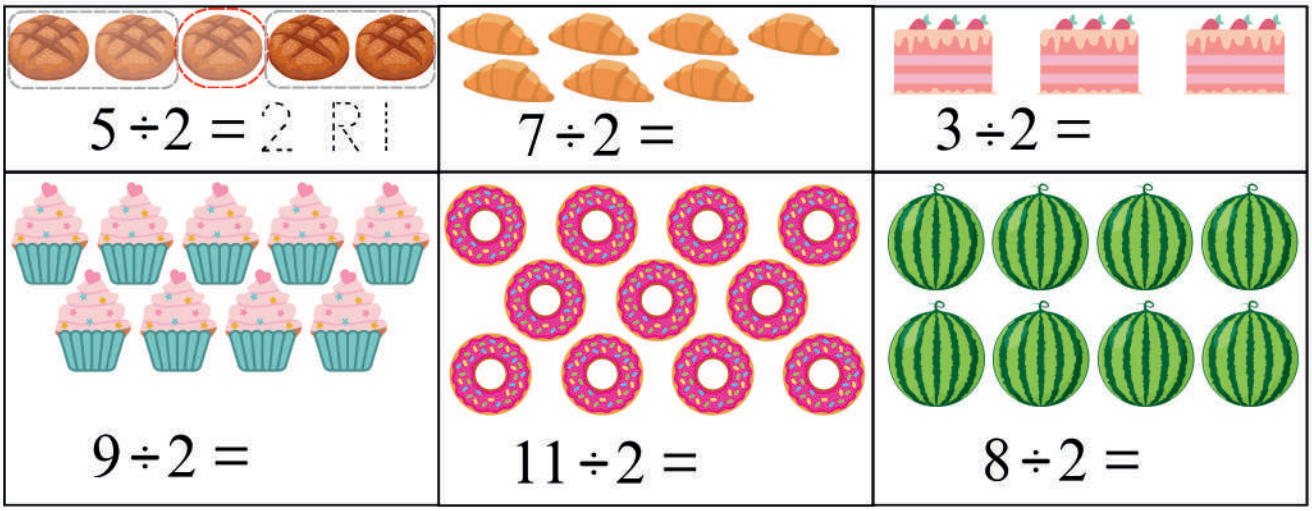
3	x	3	x		=	27
x		x		x		
	x	8	=		x	40
=		÷		x		
30	÷		=			
		=		=		
		4		30		



Multiply the quotient by the divisor to check your division.

#15 Date_____

Draw lines to divide each set into equal halves. Circle any leftover in red.

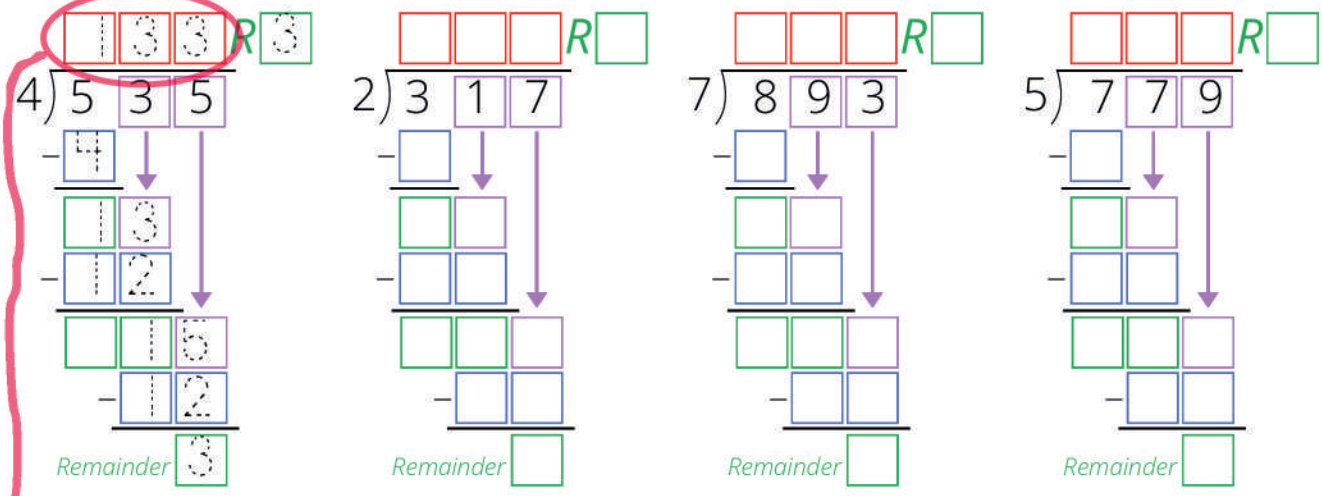


WORD PROBLEMS

What is half of four squared plus four?

What is half of the quantity of seven and three?

Today you get to be lazy and leave remainders in your quotient. Enjoy it while it lasts!



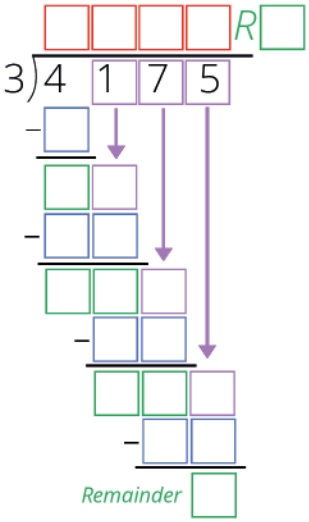
Use multiplication to check your division.

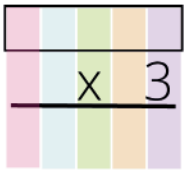
add the remainder 535

add the remainder _____

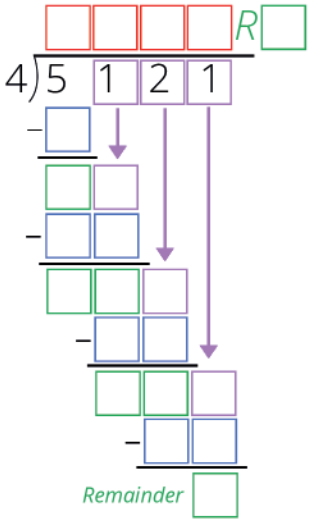
add the remainder _____

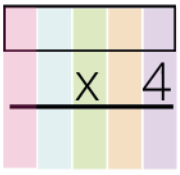
add the remainder _____



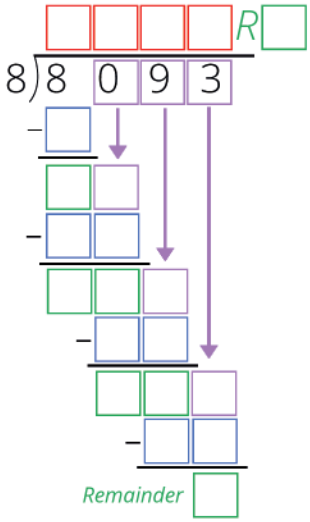


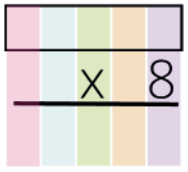
add the remainder _____





add the remainder _____





add the remainder _____

How many cubes are in this structure?

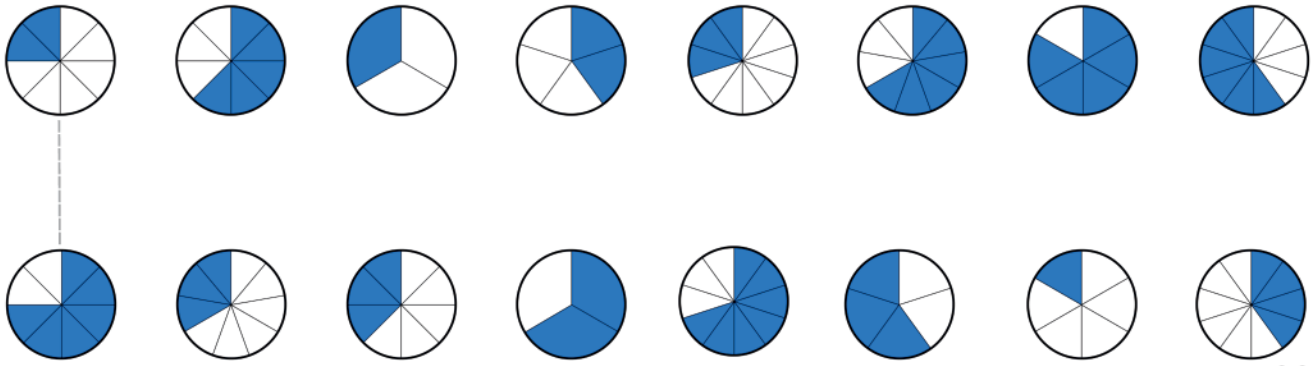
How many cubes are in this structure?

WORD PROBLEMS

Twelve is how much less than the square root of one hundred forty-four?

The quantity of thirteen and ten is how much more than half of forty?

Draw lines to MATCH these fractions so they add up to ONE WHOLE. (3.15)



#16 Date_____

Trace then write each term, then draw a line to match each term to its definition.

numerator

denominator

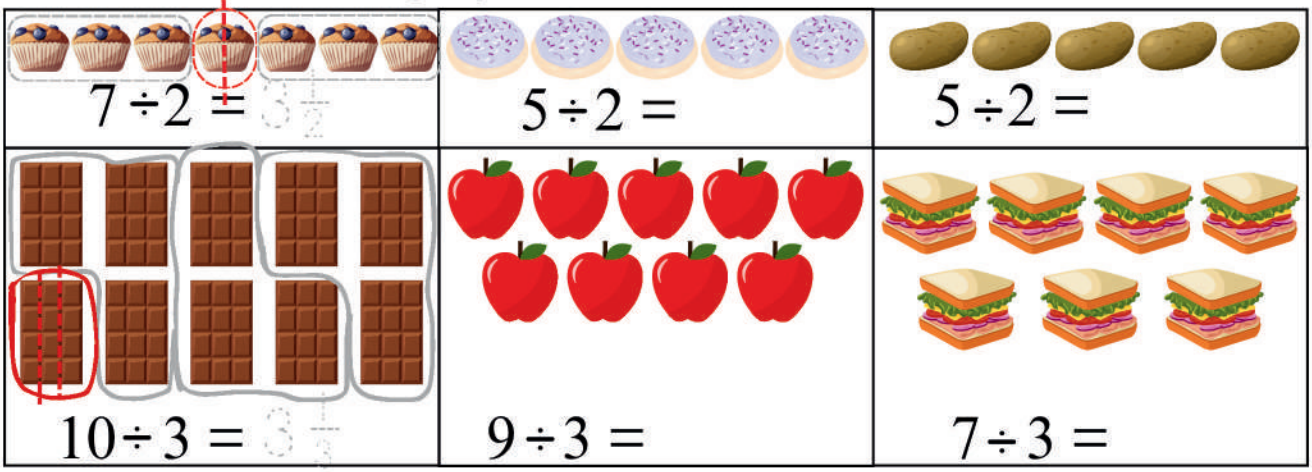
fraction

divisor

quotient

- The answer to a division problem.
- A piece of something.
- The bottom number in a fraction, it tells you how many pieces the shape is divided into.
- The number by which the dividend is divided.
- The top number in a fraction, it tells you how many pieces you have.

Divide each set, including any leftovers.



These problems are from page 28 & 29, so you don't have to do the whole problem. Just divide the remainder by the divisor.

535 ÷ 4 = 133 R3 = 133 3/4

779 ÷ 5 = 155 R4 = _____

317 ÷ 2 = 158 R1 = _____

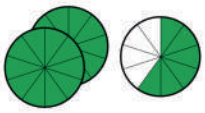
4175 ÷ 3 = 1391 R2 = 1391 2/3

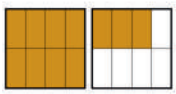
893 ÷ 7 = 127 R4 = _____

5121 ÷ 4 = 1280 R1 = _____

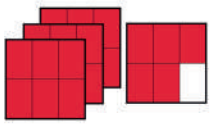
Name these fractions as mixed numbers and improper fractions.

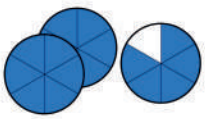

3/4 7/4


___ ___

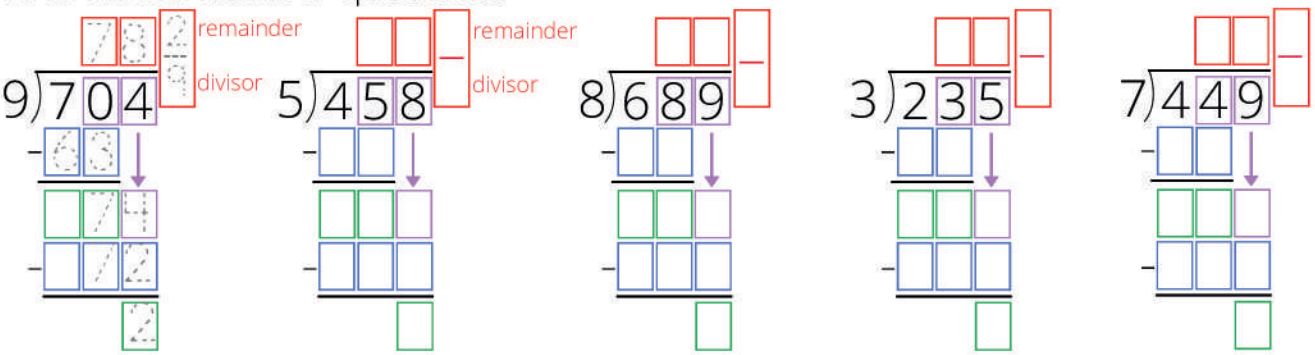

___ ___


___ ___

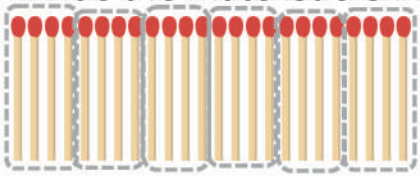

___ ___


___ ___

Find mixed number quotients.

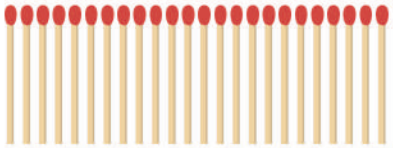


Divide the matchsticks into SIX equal groups. (4.16)



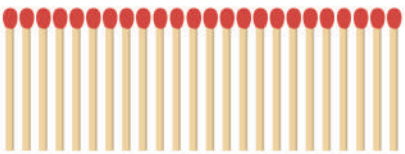
What is 1/6 of 24?
What is 2/6 of 24?
What is 3/6 of 24?
What is 4/6 of 24?
What is 5/6 of 24?
What is 6/6 of 24?

Divide the matchisticks into FOUR equal groups.



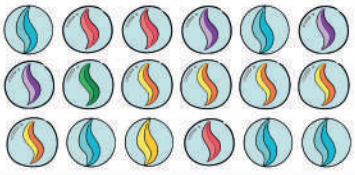
What is 1/4 of 24?
What is 2/4 of 24?
What is 3/4 of 24?
What is 4/4 of 24?

Divide the matchsticks into EIGHT equal groups.



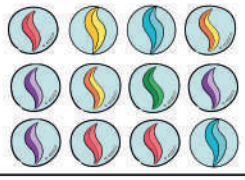
What is 1/8 of 24?
What is 2/8 of 24?
What is 3/8 of 24?
What is 4/8 of 24?
What is 5/8 of 24?
What is 6/8 of 24?
What is 7/8 of 24?
What is 8/8 of 24?

Divide the marbles into SIX equal groups.



What is 1/6 of 18?
What is 2/6 of 18?
What is 3/6 of 18?
What is 4/6 of 18?
What is 5/6 of 18?
What is 6/6 of 18?

Divide the marbles into SIX equal groups.



What is 1/6 of 12?
What is 2/6 of 12?
What is 3/6 of 12?
What is 4/6 of 12?
What is 5/6 of 12?
What is 6/6 of 12?

$\frac{1}{12}$ of 36=

$\frac{1}{6}\ \frac{2}{12}$ of 36=

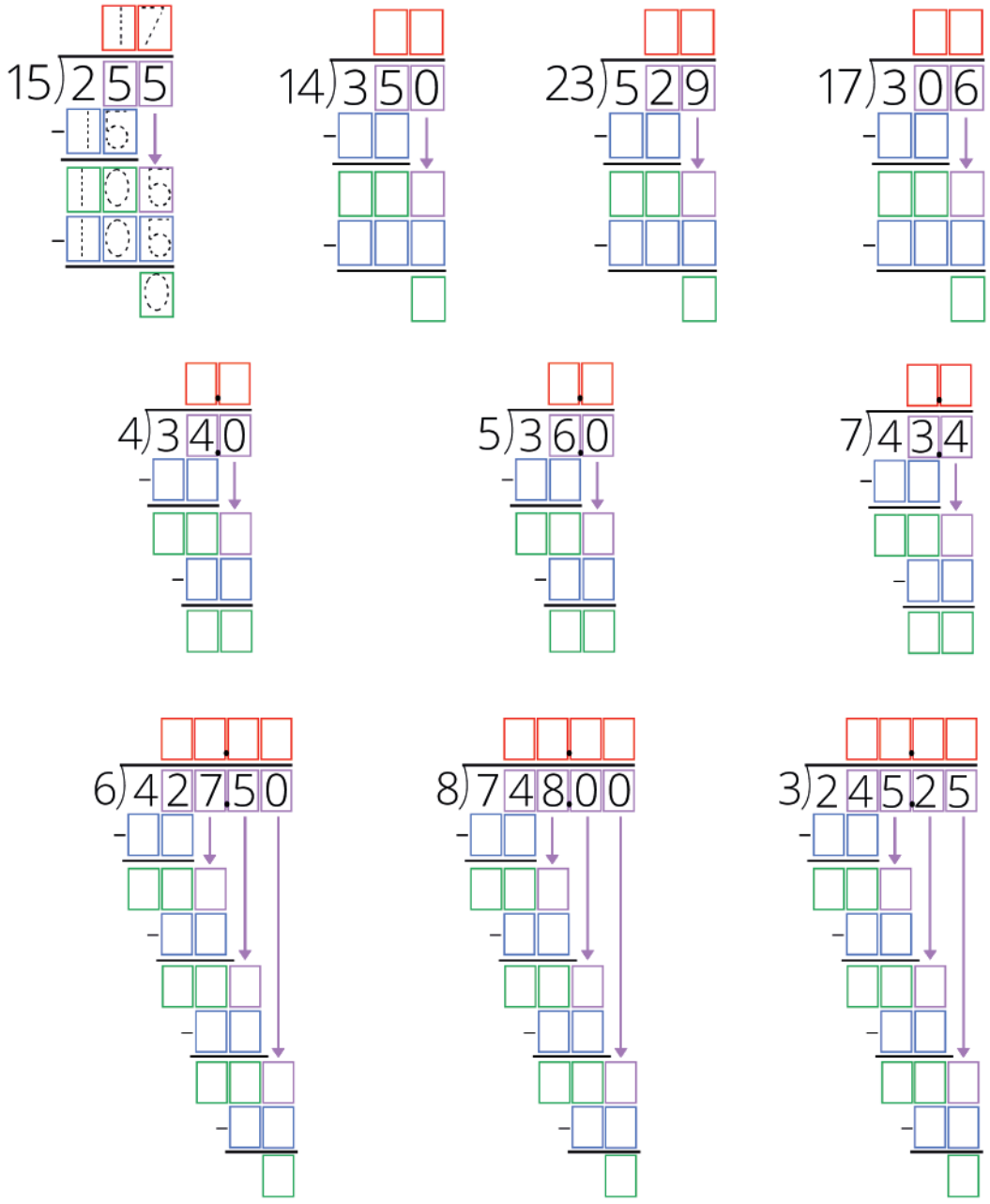
$\frac{1}{4}\ \frac{3}{12}$ of 36=

$\frac{1}{3}\ \frac{4}{12}$ of 36=

$\frac{1}{2}\ \frac{6}{12}$ of 36=

#17 Date_____

Divide.
Multiply.
Subtract.
Bring Down.
Repeat.



Adding or subtracting by place value (3.8)

add/subtract 1 in the ONES place

1 less	1 more
16	18
____	____
____	____

add/subtract 1 in the TENS place

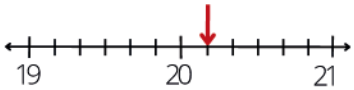
10 less	10 more
117	137
____	____
____	____

add/subtract 1 in the HUNDREDS place

100 less	100 more
149	349
____	____
____	____

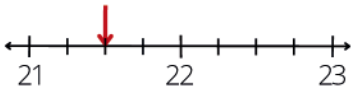
To which mixed number does each arrow point? Round to the nearest whole number.

17 $\frac{7}{8}$ _____ 18 _____

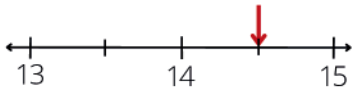


_____ _____

_____ _____



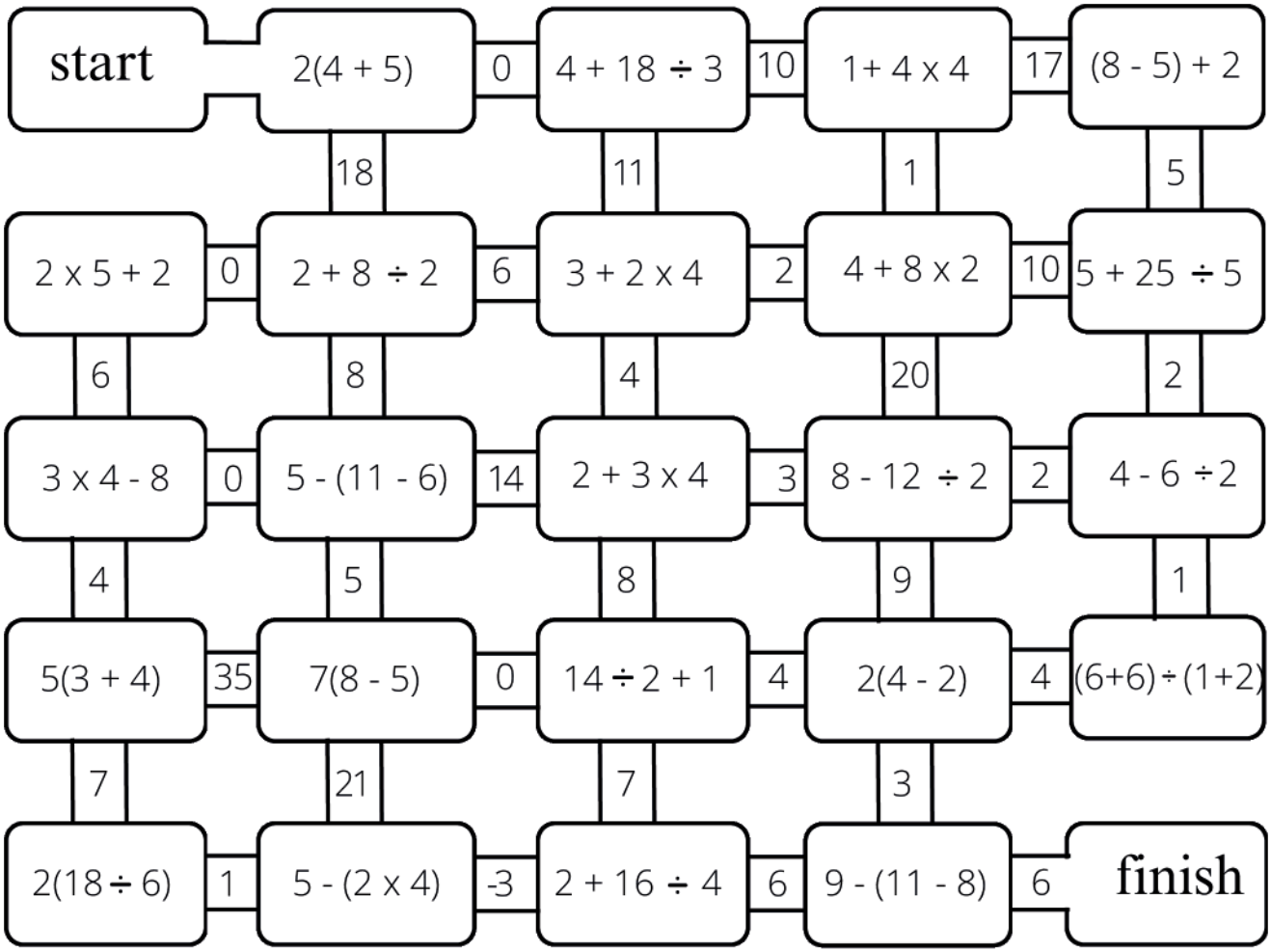
_____ _____



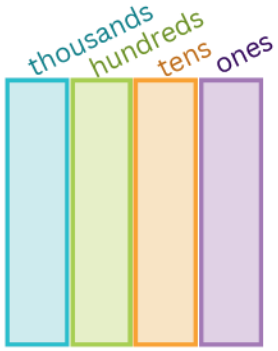
_____ _____

_____ _____

Choose the correct answer to each problem to find your way through this maze. (3.83)



#18 Date_____

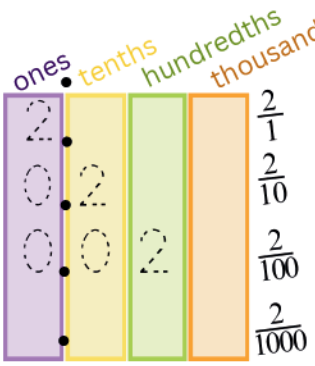


2 x 1 =

2 x 10 =

2 x 100 =

2 x 1000 =

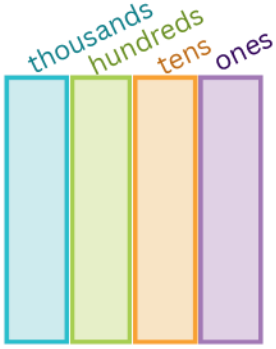


2 ÷ 1 =

2 ÷ 10 =

2 ÷ 100 =

2 ÷ 1000 =



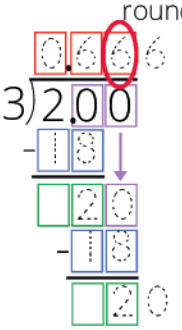
2 x 3 =

2 x 30 =

2 x 300 =

2 x 3000 =

round to the hundredths place



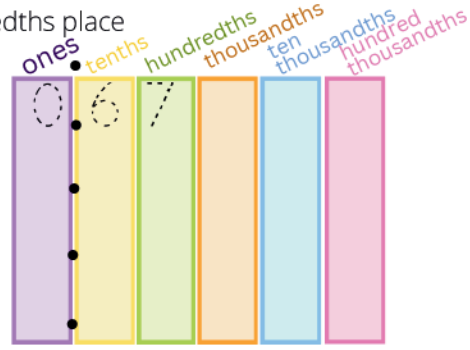
= 0.67

2 ÷ 3 =

2 ÷ 30 =

2 ÷ 300 =

2 ÷ 3000 =



Use your place value chart to find the products and quotients.

29 x 10 = 290	29 ÷ 10 = 2.9	29 ÷ 100 = 0.29
51 x 10 = _____	51 ÷ 10 = _____	51 ÷ 100 = _____
68 x 10 = _____	68 ÷ 10 = _____	68 ÷ 100 = _____
37 x 10 = _____	37 ÷ 10 = _____	37 ÷ 100 = _____
14 x 10 = _____	14 ÷ 10 = _____	14 ÷ 100 = _____

Round to the nearest TEN _____

Round to the nearest HUNDRED _____

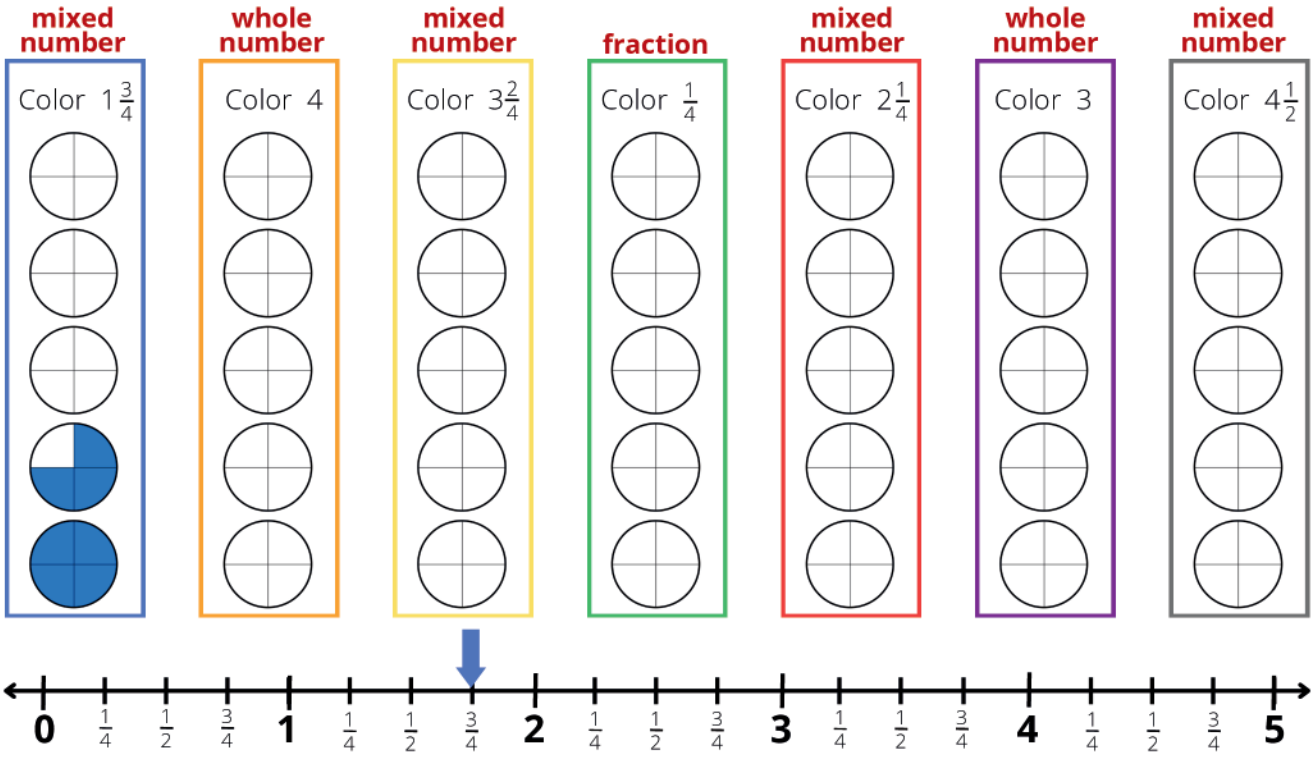
Round to the nearest THOUSAND _____

Round to the nearest TEN _____

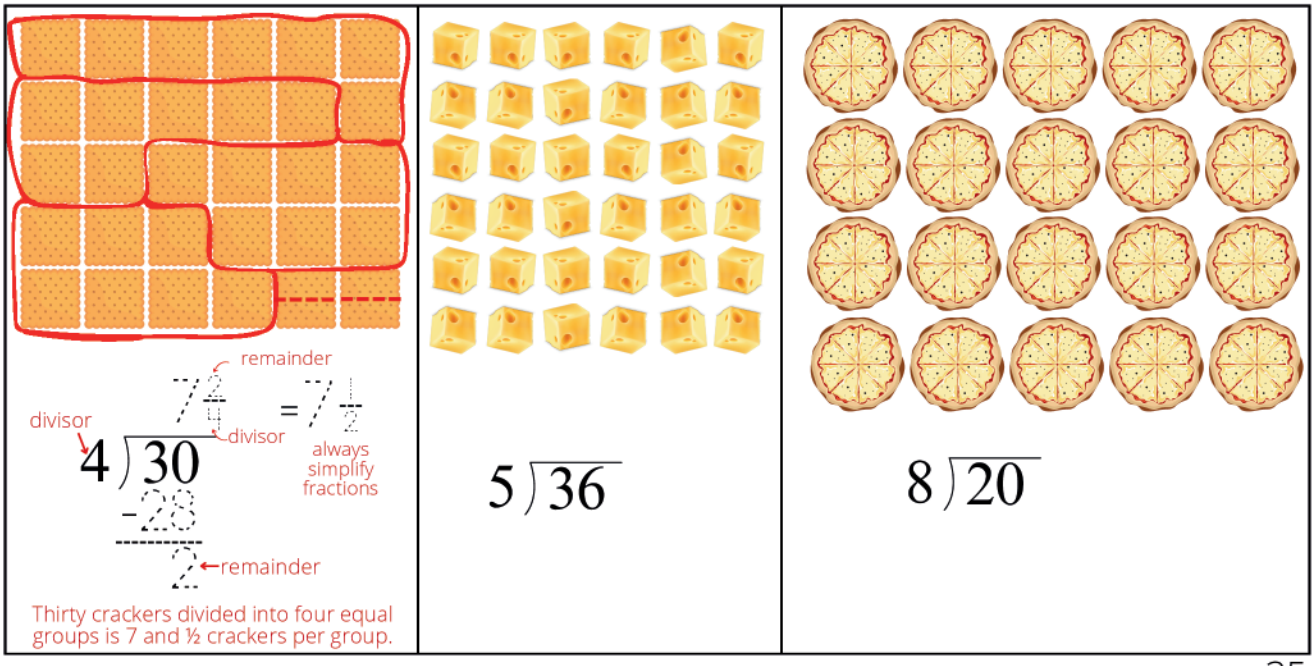
Round to the nearest TENTH _____

Round to the nearest HUNDREDTH _____

Color the number in each colored rectangle. Then draw an arrow that color pointing to the number on the number line below. (3.16)



Draw lines to divide each set into the number of groups specified by the divisor. Circle any REMAINDERS in red, then divide them into the number of groups specified by the divisor. Divide the remainder PIECES equally between the groups.



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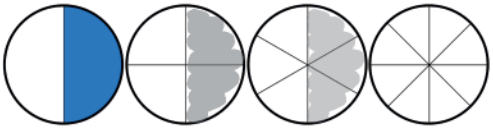
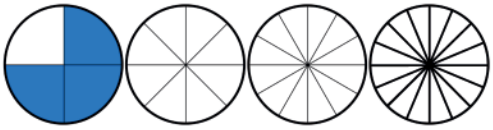
L V X T A O O D I V I S O R P Q
M P J I Y Q N E S U P Z E R O T
F R A C T I O N O F B E H S T R
L O Y O E K U O R K A T O L N E
A D D G W O Z M O V M O B C E D
M U L T I P L I C A T I O N L N
I C O G O I A N B O X A O Y A I
C T H X R O T A R E M U N D V A
E O U W Q U O T I E N T R I I M
D V O E F I L O T G A O D K U E
F C Z M O U J R H R N O B O Q R
O N O I S I V I D P C O Q D E S

- The answer to a division problem.
- The leftover after dividing.
- A piece of something.
- The bottom number in a fraction, it tells you how many pieces the shape is divided into.
- The number by which the dividend is divided.
- The top number in a fraction, it tells you how many pieces you have.
- Another name for repeated addition.
- Math operation for separating an amount into equal parts.
- A piece of something that always has a denominator of ten or a power of ten.
- The answer to a multiplication problem.
- Fractions with the same value are _____.

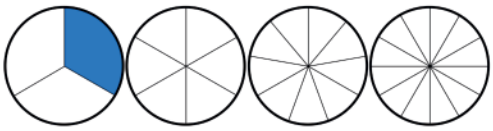
Find three equivalent fractions for each fraction. Color the circles to match.



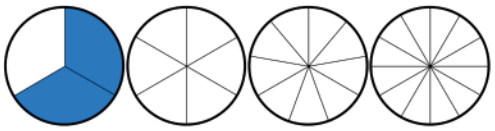
$\frac{1}{2} = \frac{2}{4} = \frac{3}{6} = \square$



$\frac{3}{4} = \square = \square = \square$



$\frac{1}{3} = \square = \square = \square$

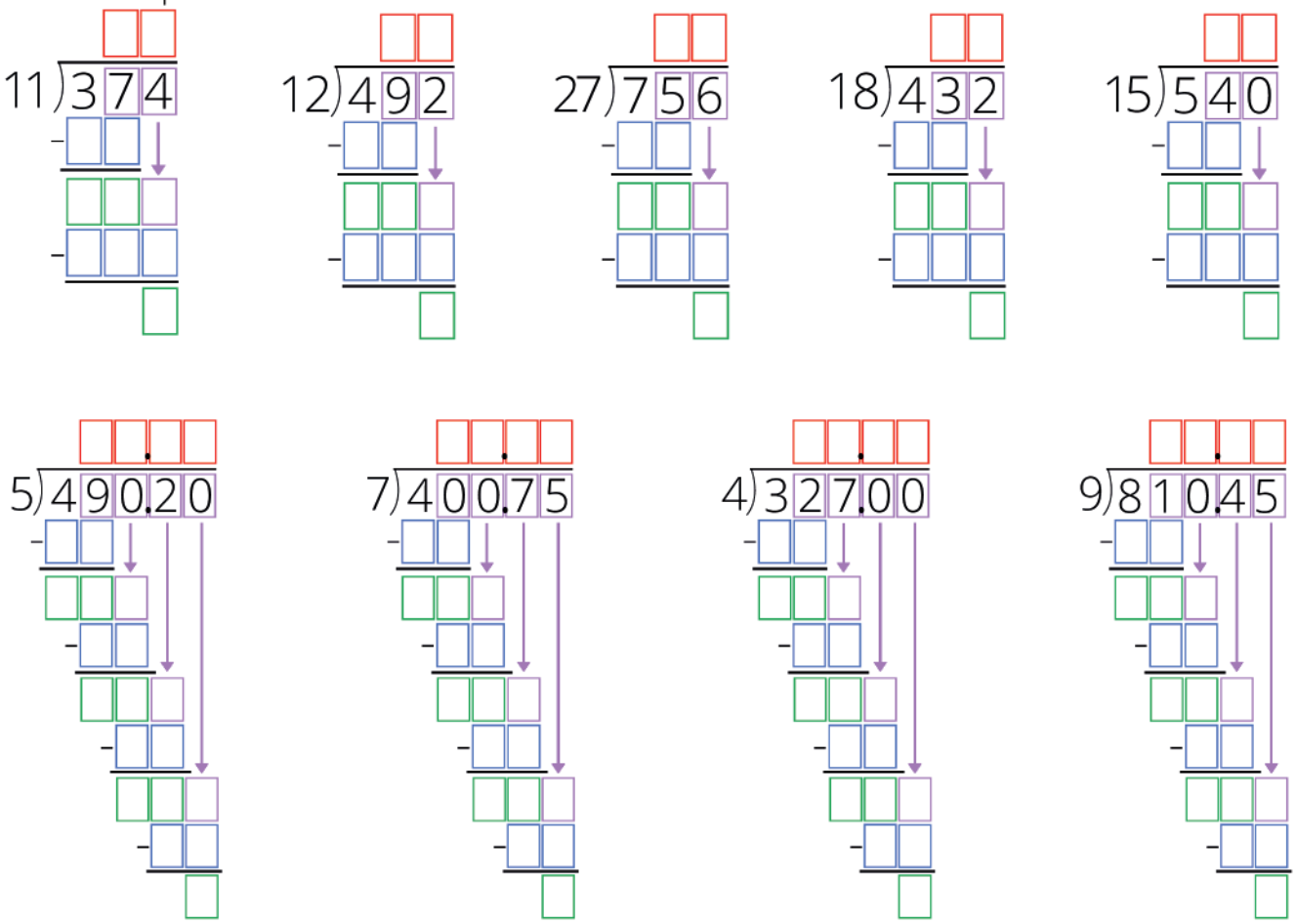


$\frac{2}{3} = \square = \square = \square$

You bought a dozen candy bars for 75 cents each. How much did you spend?

What is the total price for 4 churros that cost $2.50 each?

Find the quotients.



Fill in the blanks to complete each chart.

	x20	x200	x2000
4	80	800	8000
3			
2			

$2\overline{)4.0}$ $2\overline{)2.0}$

$2\overline{)3.000}$ 1.500

	÷2	÷20	÷200	÷2000
4	2	0.2	0.02	0.002
3	1.5			
2	1			

	x3	x30	x300
9	27	270	2700
12			
3			

$3\overline{)9.0}$ $3\overline{)12}$ $3\overline{)3.0}$

	÷3	÷30	÷300	÷3000
9	3	0.3	0.03	0.003
12	4			
3	1			

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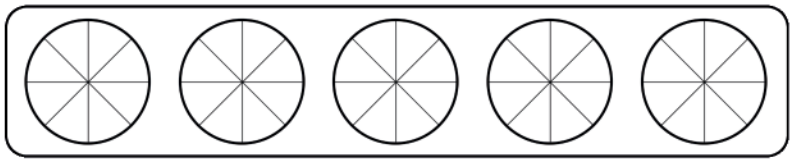
Order these fractions from least to greatest, then color them and label them.

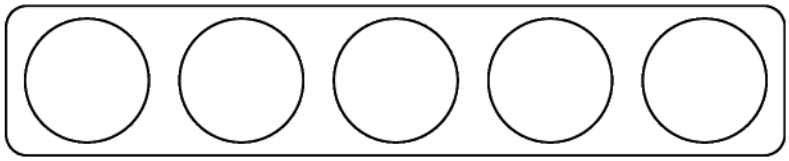
(All denominators are the same!)

$\frac{3}{8}$ $\frac{4}{8}$ $\frac{6}{8}$ $\frac{1}{8}$ $\frac{7}{8}$



(All of the numerators are one!)

$\frac{1}{2}$ $\frac{1}{1}$ $\frac{1}{4}$ $\frac{1}{5}$ $\frac{1}{3}$



Compare these fractions (<, >, =). (All numerators are one! Larger denominators are smaller pieces.)

$\frac{1}{2} \; \frac{1}{3}$ $\frac{1}{4} \; \frac{1}{5}$ $\frac{1}{3} \; \frac{1}{4}$ $\frac{1}{5} \; \frac{1}{8}$

Compare these fractions (<, >, =). (The denominators in each pair are the same, so the pieces are the same size!)

$\frac{3}{4} \; \frac{1}{4}$ $\frac{5}{9} \; \frac{4}{9}$ $\frac{2}{4} \; \frac{5}{4}$ $\frac{1}{7} \; \frac{6}{7}$

Use your fraction circles to compare these fractions.

$\frac{2}{3} \; \frac{3}{5}$ $\frac{5}{8} \; \frac{3}{5}$ $\frac{1}{4} \; \frac{4}{5}$ $\frac{5}{6} \; \frac{3}{4}$

$\frac{3}{6} \; \frac{1}{2}$ $\frac{1}{3} \; \frac{3}{4}$ $\frac{4}{4} \; \frac{5}{5}$ $\frac{2}{3} \; \frac{7}{8}$

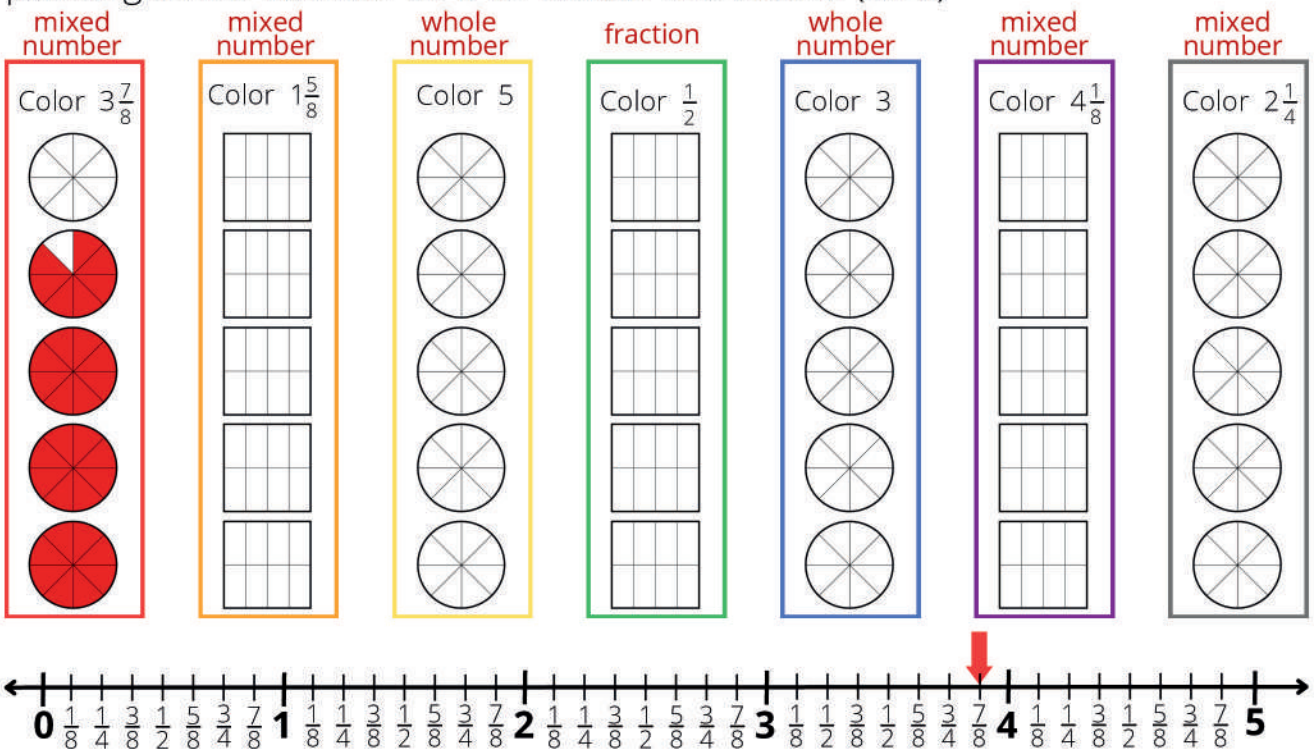
WORD PROBLEMS

What is one third of thirty-six?

How much more is twice the quantity of seven and two than six times three?

What times five is one less than four squared?

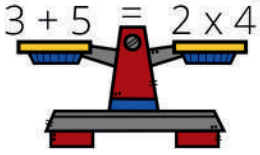
Color the number in each colored rectangle. Then draw an arrow that color pointing to the number on the number line below. (3.16)



Adding or subtracting by place value (3.8)

add/subtract 2 in the ONES place		add/subtract 2 in the TENS place		add/subtract 2 in the HUNDREDS place	
2 less	2 more	20 less	20 more	200 less	200 more
23, 25, 27		125, 145, 165		194, 394, 594	
___, 17, ___		___, 527, ___		___, 279, ___	
___, 32, ___		___, 268, ___		___, 553, ___	

Balance these equations. Remember to follow the Order of Operations. (4.31)



$18 \div \_2\_ = 3 \times 3$

$5 \times 8 = \_\_\_ \times 10$

$2(3 + 3) = 48 \div \_\_\_$

$6 + 3^2 = 5 \times \_\_\_$

$\_\_\_ + 4^2 = 6 \times 3$

$8^2 = 4 \times \_\_\_ \times 2$

$5(4 + 5) = 15 \times \_\_\_$

$48 \div \_\_\_ = \sqrt{36}$

$\sqrt{25} + 3 = 56 \div \_\_\_$

$\_\_\_ \times 6 = 3(4 + 8)$

$2^3 \times 6 = 4 \times \_\_\_$

$6^2 = 4 \times \_\_\_$

$3^3 - 7 = \_\_\_ \times 5$

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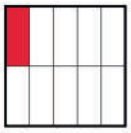
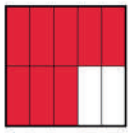
Identify each shaded part using a fraction, a decimal, words and percentage (when the denominator is 100).

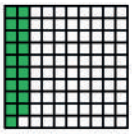
$\frac{7}{10}$ 0.7 seven tenths



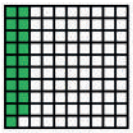
_____ _____ _____



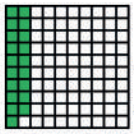
_____ _____ _____



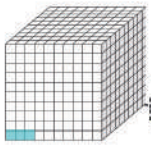
$\frac{19}{100}$ 19% 0.19 nineteen hundredths



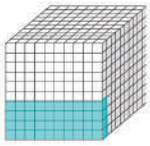
_____ _____ _____



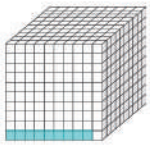
_____ _____ _____



$\frac{3}{1000}$ 0.003 three thousandths



$\frac{40}{1000}$ _____ _____



$\frac{9}{1000}$ _____ _____

This bracelet has 15 beads.
What fraction of them are blue?

What fraction of them are pink?

What fraction of them are yellow?

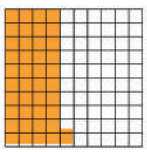
What is the sum of all three fractions?

Draw two lines that are:

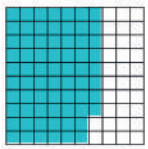
perpendicular horizontal and vertical	parallel vertical
intersecting oblique	parallel horizontal

Two quarters and one dime is what percent of a dollar?

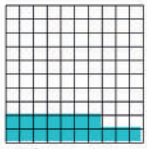
Each block has 100 squares. Write the percentage, fraction and decimal for each.



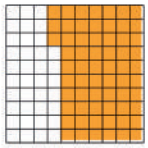
41% = $\frac{41}{100}$ = 0.41



= =

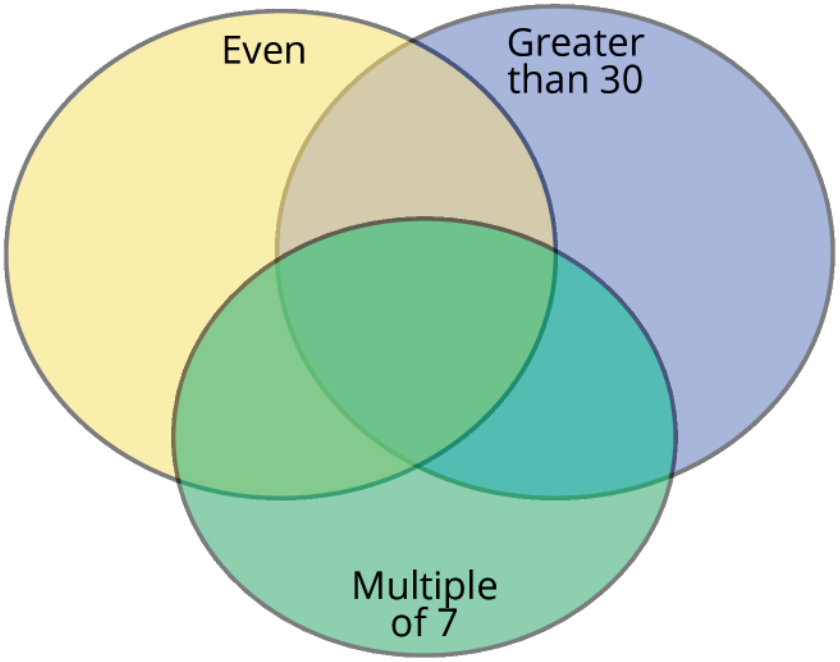


= =



= =

Find the correct space for each number in this Venn diagram. Cross out numbers as you use them. Circle any leftover numbers that don't fit into the diagram. (3.30)



21	12
35	54
30	37
6	9
52	14
49	36
40	42
28	56
15	7
98	70
99	84

Use your place value chart to find the products and quotients.

35 x 10 = 350	35 ÷ 10 = 3.5	35 ÷ 100 = 0.35
83 x 10 = _____	83 ÷ 10 = _____	83 ÷ 100 = _____
24 x 20 = _____	24 ÷ 20 = _____	24 ÷ 200 = _____
26 x 20 = _____	26 ÷ 20 = _____	26 ÷ 200 = _____
44 x 20 = _____	44 ÷ 20 = _____	44 ÷ 200 = _____

Use words to name the following numbers:

345,012 _____

9,003,199 _____

14,300,005 _____

What year is one century after 1776? _____

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Draw lines to match terms.

indeterminate	$\frac{1}{0}$
mixed number	$\frac{0}{0}$
0	$\frac{1}{1}$
undefined	2
whole number	$\frac{0}{1}$
1	$\frac{35}{4}$
improper fraction	$1\frac{1}{2}$

Trace each term.

indeterminate

mixed number

undefined

whole number

integer

improper fraction

Draw lines to match the mixed numbers, pictures, decimals and improper fractions. (4.25)

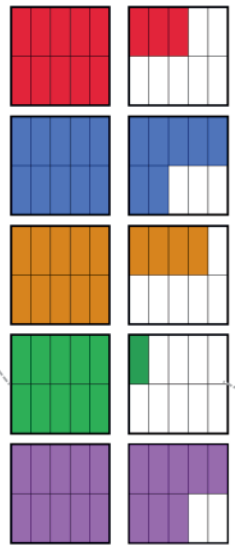
$1\frac{1}{10}$

$1\frac{4}{10}$

$1\frac{3}{10}$

$1\frac{8}{10}$

$1\frac{7}{10}$



1.7

1.8

1.4

1.3

1.1

$\frac{18}{10}$

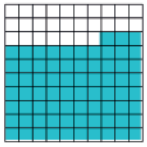
$\frac{13}{10}$

$\frac{11}{10}$

$\frac{17}{10}$

$\frac{14}{10}$

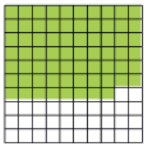
What percent:



is shaded? _____

is not shaded?_____

Add the percentages _____



is shaded? _____

is not shaded?_____

Add the percentages _____

Find the missing numbers in each number sentence.

2	x		x		=	54
				x		
	÷	6	=			
				x		
		9	x		=	36
				=		
6	x	6	=			

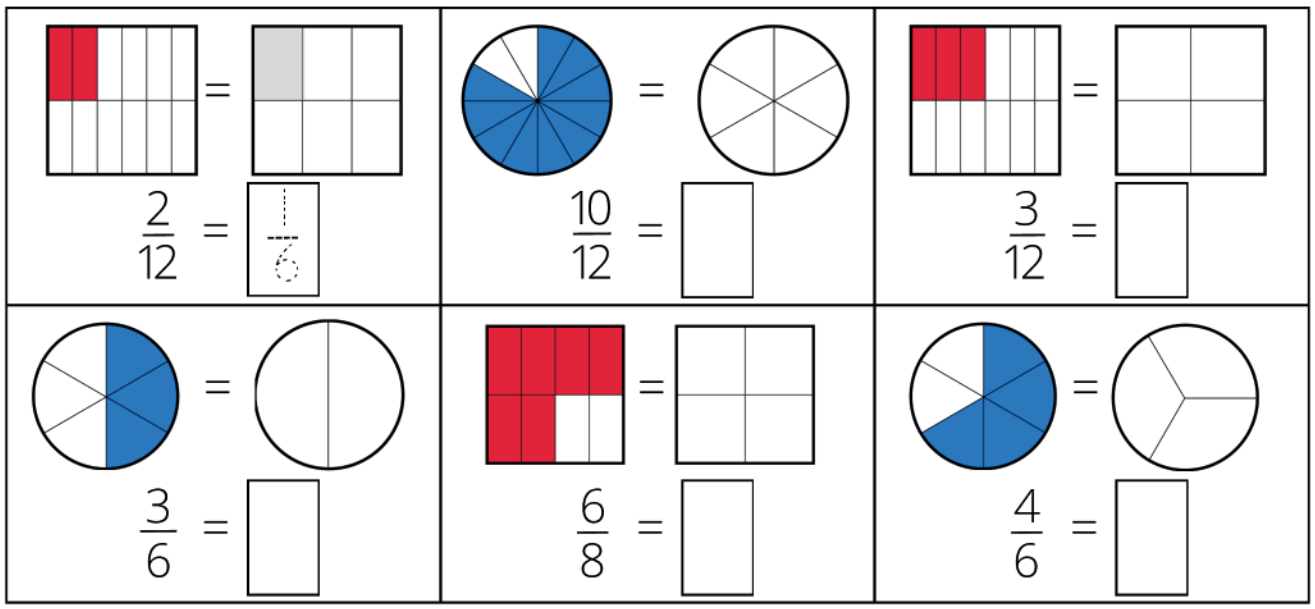
				7		8		
				x		x		
		4	x		x		=	96
		x		x		=		
4	x		x		=	64		
		=		=				
		16		84				

WORD PROBLEMS

What is the product of thirty-two and forty?

What is the sum of three hundred four and five hundred ninety-two?

Simplify these fractions.



$\frac{6}{6} =$ $\frac{2}{4} = \frac{1}{2}$ $\frac{12}{4} =$ $\frac{4}{8} =$ $\frac{5}{5} =$ $\frac{25}{5} =$

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Add and subtract these mixed numbers. You can stack them or convert them to improper fractions.

$1\frac{1}{5} + 2\frac{3}{5} =$ $4\frac{2}{3} - 1\frac{1}{3} =$ $3\frac{1}{6} + 1\frac{1}{6} =$

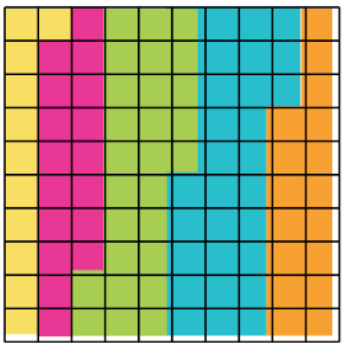
$6\frac{1}{2} - 3\frac{1}{2} =$ $3\frac{3}{4} + 3\frac{1}{4} =$ $5\frac{3}{8} - 2\frac{5}{8} =$

Find the missing fractions to make each number sentence true.

$\frac{1}{4} + \square = \frac{3}{4}$ $\square + \frac{1}{5} = \frac{4}{5}$ $\frac{1}{3} + \square = \frac{3}{3} = 1$ $\square + \frac{1}{6} = \frac{5}{6}$

$\square - \frac{3}{8} = \frac{1}{8}$ $\square + \frac{3}{2} = \frac{9}{2} = 4\frac{1}{2}$ $\frac{7}{8} - \square = \frac{3}{8}$ $\frac{2}{6} + \square = \frac{4}{6}$

This grid has 100 squares. What percentage is each color?



percent	fraction	decimal
||%	$\frac{||}{100}$	0.||

percent	fraction	decimal

Add all of the percentages.

|| + ■ + ■ + ■ + ■ =

Why do the percentages of each color all add up to 100%? _____

_____

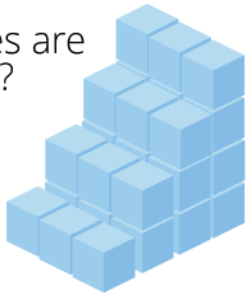
Do percentages always add up to 100%? _____

Add the fractions. Color the sum of the two fraction pictures in each space.

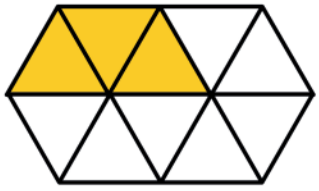
 $\frac{3}{4} + \frac{1}{4} = \frac{4}{4} = 1$	 $\frac{1}{3} + \frac{2}{3} = \frac{\quad}{\quad} =$	 $\frac{2}{5} + \frac{3}{5} = \frac{\quad}{\quad} =$
 $\frac{1}{2} + \frac{1}{2} = \frac{\quad}{\quad} =$	 $\frac{5}{6} + \frac{1}{6} = \frac{\quad}{\quad} =$	 $\frac{4}{6} + \frac{2}{6} = \frac{\quad}{\quad} =$

How many cubes are in this structure?

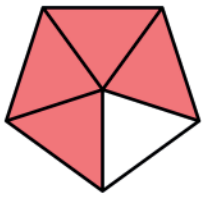
How many cubes are in this structure?



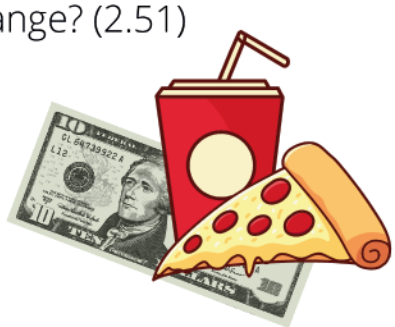
Write the part of this hexagon that is NOT shaded as a fraction and a decimal. What is a hexagon?



Write the shaded part of this pentagon as a fraction and a decimal. What is a pentagon?



If I pay for my meal with a ten dollar bill, what is my change? (2.51)



#24 Date_____

List all of the prime numbers less than 50. *Hint: There are 15 of them.*

List the factors of:

12: 1, 2, 3, 4, 6, 12

15: ___, ___, ___, ___

18: ___, ___, ___, ___, ___, ___

21: ___, ___, ___, ___

24: ___, ___, ___, ___, ___, ___, ___, ___

36: ___, ___, ___, ___, ___, ___, ___, ___, ___

Name the greatest common factor (GCF) of:

12 and 15: 3

12 and 36: _____

18 and 21: _____

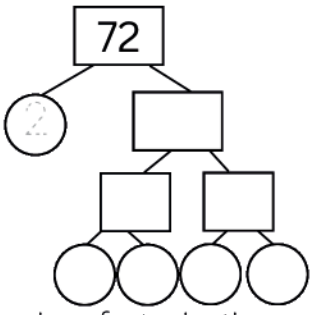
24 and 36: _____

Rename each fraction in its simplest form. (Divide both numerator and denominator by the GCF)

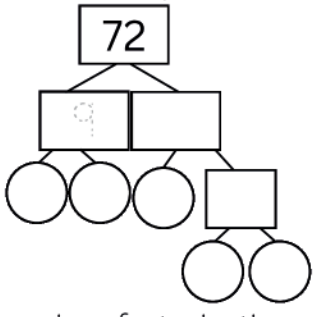
$\frac{12}{15} \div \frac{3}{3} = \frac{4}{5}$ $\frac{12}{36} \div \frac{1}{1} =$ $\frac{18}{21} \div \frac{1}{1} =$ $\frac{24}{36} \div \frac{1}{1} =$

List the **factors** of 72: 1, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, 72

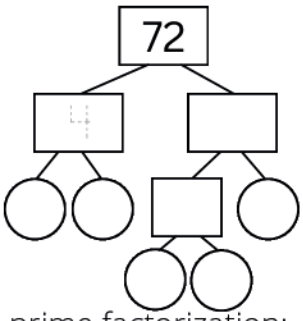
Factor the number in the top box of each factor tree. The composite numbers go in the rectangles and the prime numbers go in the circles.



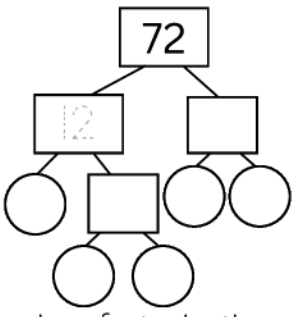
prime factorization: $2^3 \times 3^2$



prime factorization: _____



prime factorization: _____



prime factorization: _____

Find the quotients.

23)644

19)494

34)918

21)504

28)784

8)6260.00

6)496.50

4)261.40

7)639.24

Your scores were 139, 95 and 111. How much higher was your highest score than your lowest score?

How many inches tall are you if you are 5' 3" tall?

The total price of 3 pounds of apples was $5.37. What was the price per pound?

How many yards is one half of a mile?

#25 Date_____

Find equivalent fractions.

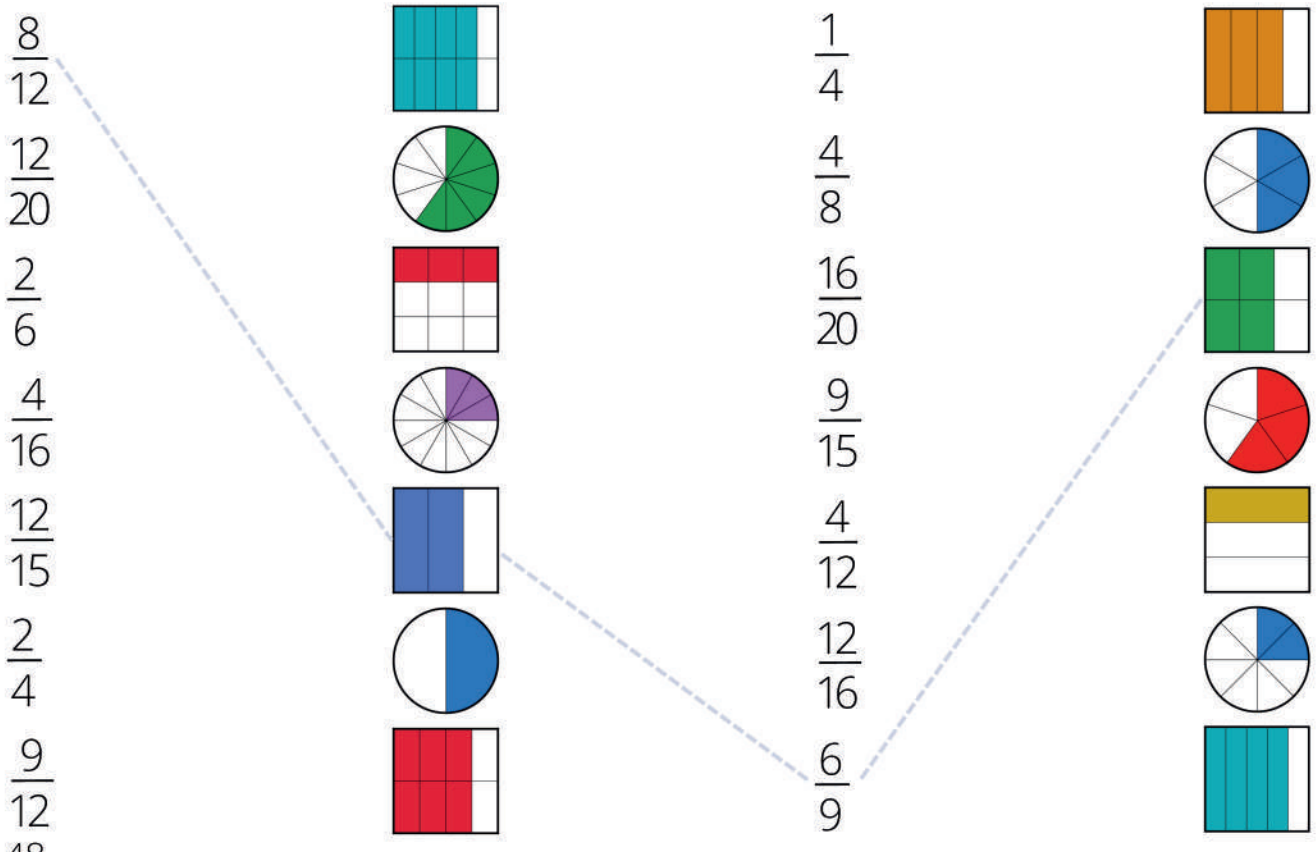
$\frac{1}{3} \times \frac{2}{2} = \frac{2}{6}$ $\frac{1}{3} \times \frac{3}{3} = \frac{3}{9}$ $\frac{1}{3} \times \frac{4}{4} = \frac{4}{12}$ $\frac{1}{3} \times \frac{5}{5} = \frac{5}{15}$ $\frac{1}{3} \times \frac{6}{6} = \frac{6}{18}$

$\frac{24}{36} \div \frac{2}{2} = \frac{12}{18}$ $\frac{24}{36} \div \frac{3}{3} = \frac{8}{12}$ $\frac{24}{36} \div \frac{4}{4} = \frac{6}{9}$ $\frac{24}{36} \div \frac{6}{6} = \frac{4}{6}$ $\frac{24}{36} \div \frac{12}{12} = \frac{2}{3}$

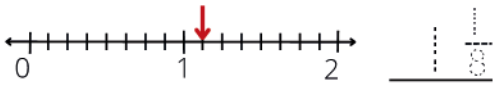
Find three equivalent fractions for each fraction.

$\frac{2}{3} = \frac{4}{6} = \frac{6}{9} = \frac{8}{12}$ $\frac{1}{4} = \frac{2}{8} = \_ = \_$ $\frac{4}{5} = \_ = \_ = \_$

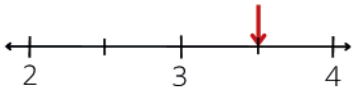
Draw lines to match the equivalent fractions.

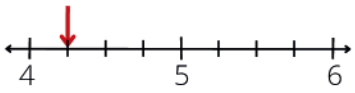


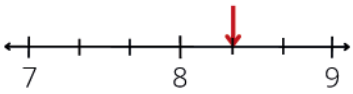
To which mixed number does each arrow point?

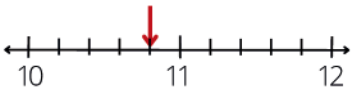


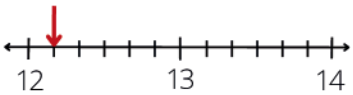
1 8











Use words to write $32\frac{5}{8}$ _____

Use words to write $57\frac{7}{10}$ _____

Use words to write 43.7 _____

What is $\frac{3}{4}$ of 36? 27

36/4 = 9 Divide 36 into four equal parts.

9 x 3 = 27 You have 3 of those parts.

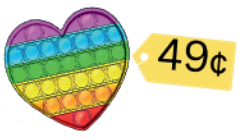
What is $\frac{5}{8}$ of 40?

What is $\frac{2}{3}$ of 27?

What is $\frac{1}{4}$ of 28?

What is $\frac{4}{5}$ of 32?

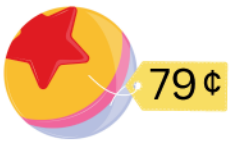
How much change will you receive if you pay for each item with $1.00? Write each amount using a cent sign then a dollar sign. (3.18)



100
−49
51

51¢

$0.51



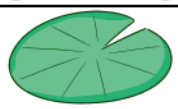
#26 Date_____

Rename the fractions so they have a common denominator, then add or subtract them. Reduce the answer to its simplest form.

$\frac{1}{3} + \frac{2}{3} = \frac{3}{3} = 1$ $\frac{1}{2} + \frac{3}{4} =$ $\frac{3}{8} + \frac{1}{4} =$ $\frac{5}{6} + \frac{2}{3} =$

$\frac{5}{6} - \frac{2}{3} =$ $\frac{2}{3} - \frac{1}{6} =$ $\frac{1}{2} - \frac{1}{4} =$ $\frac{5}{6} - \frac{2}{3} =$

Help each animal find its bed by drawing a line from the fraction in its box through all of the equivalent fractions until you reach the other side.

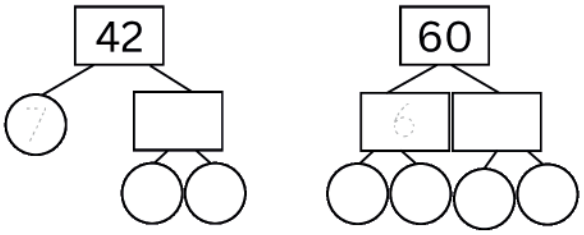
$\frac{1}{3}$ 	$\frac{7}{21}$	$\frac{5}{15}$	$\frac{3}{6}$	$\frac{3}{9}$	$\frac{6}{18}$	$\frac{9}{27}$	$\frac{8}{24}$	$\frac{9}{45}$	
$\frac{1}{4}$ 	$\frac{4}{16}$	$\frac{5}{10}$	$\frac{4}{12}$	$\frac{2}{4}$	$\frac{9}{18}$	$\frac{7}{35}$	$\frac{8}{40}$	$\frac{2}{6}$	
$\frac{1}{2}$ 	$\frac{4}{8}$	$\frac{9}{36}$	$\frac{4}{20}$	$\frac{5}{25}$	$\frac{6}{30}$	$\frac{7}{14}$	$\frac{6}{24}$	$\frac{7}{28}$	
$\frac{1}{5}$ 	$\frac{2}{10}$	$\frac{3}{15}$	$\frac{5}{20}$	$\frac{2}{8}$	$\frac{3}{12}$	$\frac{8}{32}$	$\frac{8}{16}$	$\frac{6}{12}$	

List the **factors** of 42: 1, ___, ___, ___, ___, ___, ___, 42

List the **factors** of 60: 1, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, 60

What is the Greatest Common Factor (GCF) of 42 and 60? _____

Factor the number in the top box of each factor tree.



prime factorization: _____ prime factorization: _____

Reduce this fraction to its simplest form two different ways.

$\frac{42}{60}$ $\frac{42 \div \text{GCF}}{60 \div \text{GCF}} =$

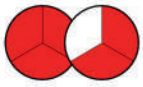
Cancel common factors from the numerator and denominators.

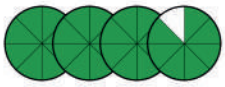
$\frac{\text{prime factorization of 42}}{\text{prime factorization of 60}} =$

Draw three circles. Divide one circle into fourths, one into fifths and one into sixths. Shade one piece of each circle. Beneath each circle, write two fractions: the part shaded and the part not shaded. Add both fractions for each circle.

Convert the mixed numbers to improper (top heavy) fractions. (4.25)

$1\frac{1}{5} = \frac{6}{5}$ 

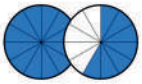
$1\frac{2}{3} =$ 

$3\frac{7}{8} =$ 

$1\frac{5}{6} =$ 

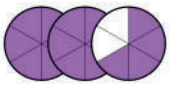
$2\frac{3}{4} =$ 

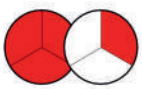
Convert the improper fractions to mixed numbers.

$\frac{19}{12} = 1\frac{7}{12}$ 

$\frac{15}{4} =$ 

$\frac{11}{10} =$ 

$\frac{16}{6} =$ 

$\frac{4}{3} =$ 

Fill in the blanks to complete each chart. (5.12)

	x30	x300	x3000
3	90	900	9000
6			
9			

	÷3	÷30	÷300	÷3000
3				
6	2	0.2	0.02	0.002
9				

	x4	x40	x400
4	16	160	1600
8			
12			

	÷4	÷40	÷400	÷4000
4	1	0.1	0.01	0.001
8	2			
12	3			

#27 Date_____

Rename each fraction in its simplest form. (Divide both numerator and denominator by the GCF)

$\frac{12}{16} \div \frac{4}{4} =$ $\frac{24}{30} \div \frac{6}{6} =$ $\frac{18}{36} \div \frac{18}{18} =$ $\frac{24}{48} \div \frac{24}{24} =$

List the first six multiples of:

2, 4, 6, 8, 10, 12, 14

3, ___, ___, ___, ___, ___, ___

4, ___, ___, ___, ___, ___, ___

5, ___, ___, ___, ___, ___, ___

12, ___, ___, ___, ___, ___, ___

15, ___, ___, ___, ___, ___, ___

Name the LEAST common multiple (LCM) of: (4.19)

2 and 3	2 and 5	2 and 4
_____	_____	_____
3 and 5	3 and 4	4 and 12
_____	_____	_____

Rename the fractions so they have a common denominator, then add or subtract. Reduce the answer to its simplest form.

$\frac{1}{2} + \frac{2}{3} = \frac{7}{6} = 1\frac{1}{6}$ $\frac{1}{3} + \frac{1}{4} =$ $\frac{3}{5} + \frac{3}{4} =$ $\frac{1}{3} + \frac{1}{2} =$

$\frac{2}{3} - \frac{1}{2} = \frac{1}{6}$ $\frac{4}{5} - \frac{1}{2} =$ $\frac{1}{3} - \frac{1}{4} =$ $\frac{3}{5} - \frac{1}{3} =$

$2\frac{1}{2} + 1\frac{1}{4} =$ $3\frac{1}{2} + 2\frac{2}{3} =$ $1\frac{3}{4} + 1\frac{1}{3} =$

$3\frac{1}{4} - 1\frac{1}{3} =$ $2\frac{1}{2} - 1\frac{3}{5} =$ $3 - 1\frac{1}{2} =$

Grandma was born in 1953. How old will she be this year?

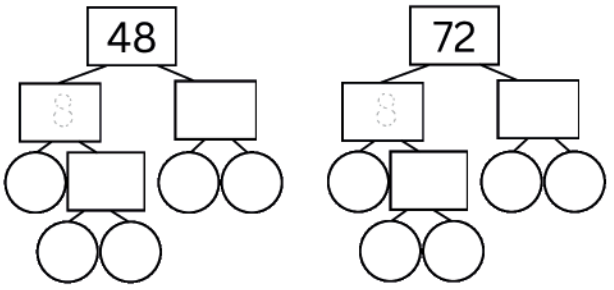
How old was she in the year 2000?

List the **factors** of 48: ___, ___, ___, ___, ___, ___, ___, ___, ___, ___

List the **factors** of 72: ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___, ___

What is the Greatest Common Factor (GCF) of 48 and 72? _____

Factor the number in the top box of each factor tree. (5.24)



prime factorization: _____

prime factorization: _____

Reduce this fraction to its simplest form two different ways.

$\frac{48}{72}$ $\qquad \frac{48 \div \text{GCF}}{72 \div \text{GCF}} =$

Cancel common factors from the numerator and denominators.

$\frac{\text{prime factorization of 48}}{\text{prime factorization of 72}} =$

This is a tricky puzzle. What number does each letter represent? (3.59)

$X + X - X = 9$

$X + 5Y = 7^2$

$2Z - Z = 7$

$X + Z + Y = \square$

$X - Y = \square$

$Z^2 = \square$

$X + 1 = \square$

$2Y = \square$

$X = \square$

$Y = \square$

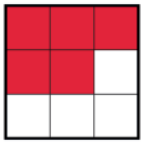
$Z = \square$

Find the lowest common denominator (LCD) of each group of fractions. Then RENAME each fraction using the LCD. Then order the fractions from the least to the greatest. (4.19)

Fractions LCD ____	$\frac{2}{6}$	$\frac{1}{2}$	$\frac{3}{4}$	$\frac{7}{8}$	$\frac{1}{4}$
Equivalent Fractions with LCD					
Order fractions least to greatest					

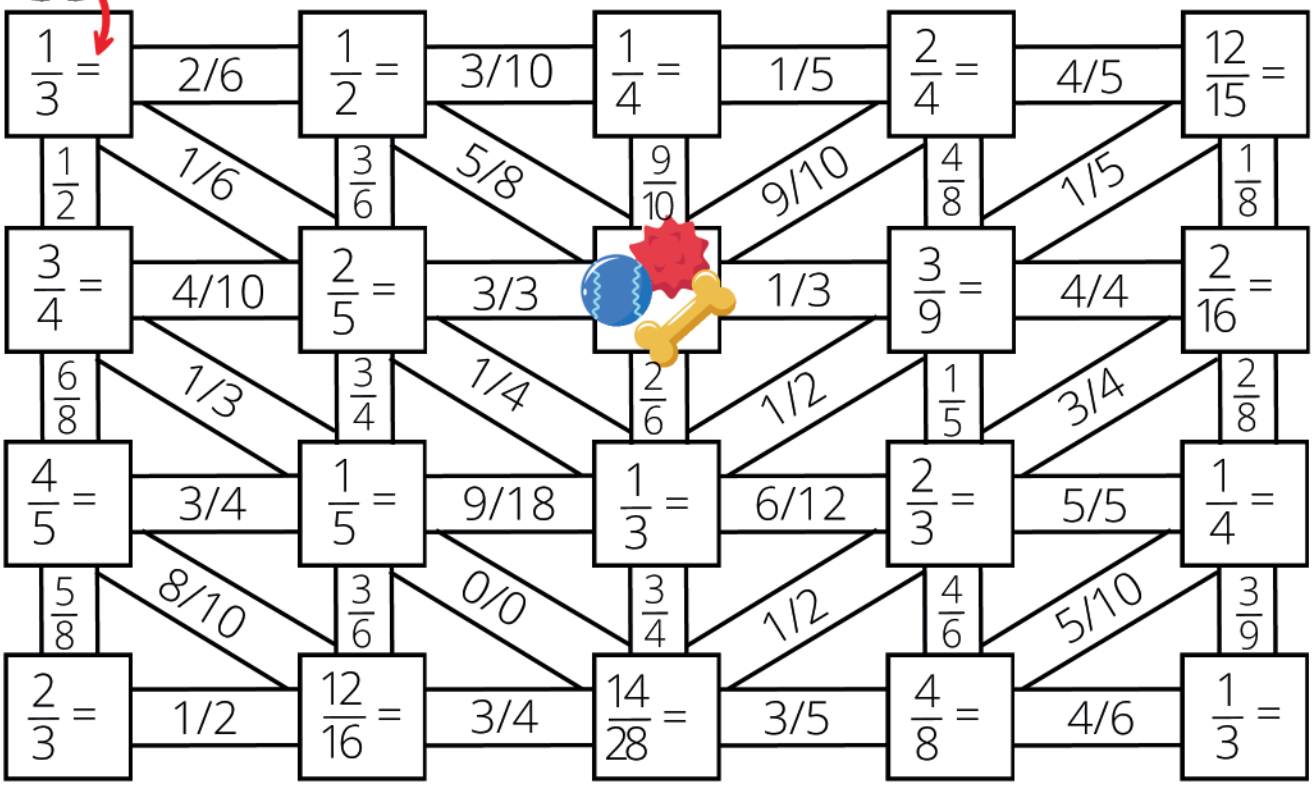
Fractions LCD ____	$\frac{1}{4}$	$\frac{7}{9}$	$\frac{2}{3}$	$\frac{9}{12}$	$\frac{5}{6}$
Equivalent Fractions with LCD					
Order fractions least to greatest					

#28 Date_____



Fraction Colored	Not Colored	Add both fractions. Write the number sentence.
$\frac{5}{9}$	$\frac{4}{9}$	$\frac{5}{9} + \frac{4}{9} = \frac{9}{9} = 1$

Help Fido find his toy. Match equivalent fractions to color a path through the maze. Circle the indeterminate fraction!



Find the missing fractions to make each number sentence true.

$\frac{1}{4} + \frac{5}{8} = \frac{7}{8}$ (1/4 → 2/8)

$\square + \frac{1}{10} = \frac{4}{5}$

$\frac{1}{3} + \square = 1\frac{1}{2}$

$\square + \frac{1}{6} = 1$

$\square - \frac{1}{2} = \frac{1}{8}$

$\square + \frac{1}{3} = \frac{1}{2}$

$\frac{4}{5} - \square = \frac{1}{2}$

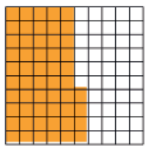
$\frac{1}{3} + \square = \frac{4}{6}$

$1\frac{1}{3} + \square = 3\frac{1}{2}$

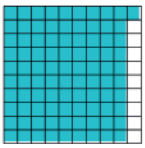
$3\frac{1}{4} - \square = 1\frac{2}{3}$

$2\frac{3}{8} - \square = 1\frac{3}{4}$

Each block has 100 squares. Write the percentage, fraction and decimal for each.



54% = $\frac{54}{100}$ = 0.54



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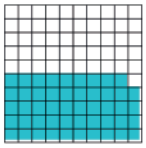

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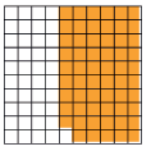


= =

There are twelve pencils in the medium-sized box. The small box has half as many. The large box has five times as many pencils as the small box.

How many pencils are in the large box? _____

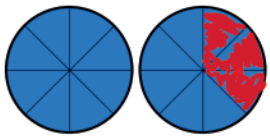
If I buy one box of each size, how many pencils will I have? _____

The small box of pencils costs $1.80. The medium-sized box costs $2.40. How much more per pencil do the pencils in the small box cost?

The large box costs $3.00. What is the cost per pencil in the large box?

#29 Date_____

Subtract fractions from whole numbers. Draw pictures if it helps.



$2\frac{16}{8} - \frac{3}{8} = \frac{13}{8} = 1\frac{5}{8}$

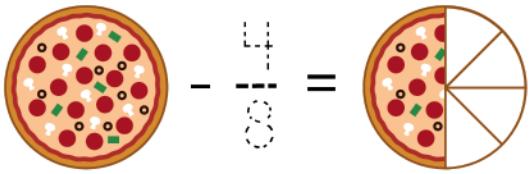
$3\frac{9}{3} - \frac{2}{3} =$

$1 - \frac{2}{5} =$ $\quad$ $3 - \frac{1}{3} =$ $\quad$ $2 - \frac{3}{4} =$

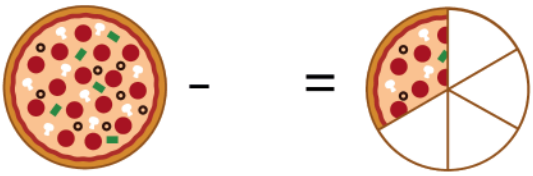
$4 - \frac{5}{6} =$ $\quad$ $2 - \frac{3}{8} =$ $\quad$ $1 - \frac{2}{3} =$

$1 - \frac{1}{4} =$ $\quad$ $4 - \frac{4}{5} =$ $\quad$ $3 - \frac{1}{2} =$

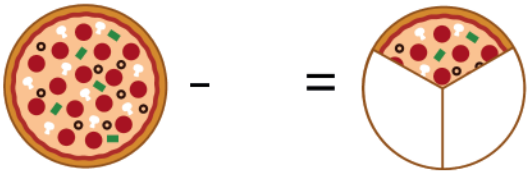
Find the missing fractional subtrahend in each number sentence.



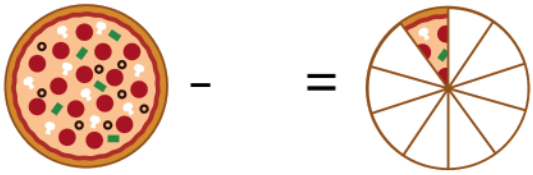
$- \frac{5}{8} =$



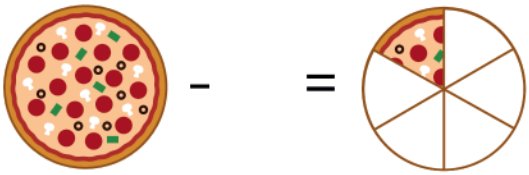
$-$ $=$



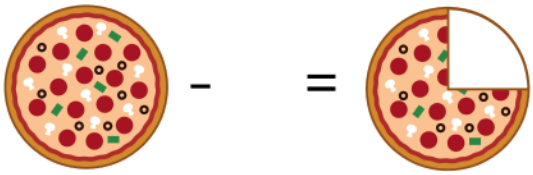
$-$ $=$



$-$ $=$



$-$ $=$



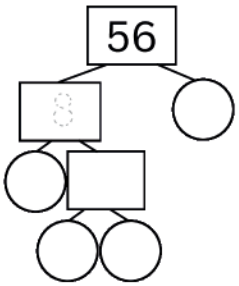
$-$ $=$

List the **factors** of 56: ___, ___, ___, ___, ____, ____, ____, ____

List the **factors** of 63: ___, ___, ___, ___, ____, ____

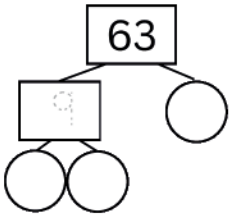
What is the Greatest Common Factor (GCF) of 56 and 63? _____

Factor the number in the top box of each factor tree. (5.24)



prime factorization:

_____



prime factorization:

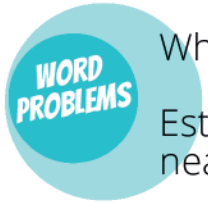
_____

Reduce this fraction to its simplest form two different ways.

$$\frac{56}{63} \qquad \frac{56 \div \text{GCF}}{63 \div \text{GCF}} =$$

Cancel common factors from the numerator and denominators.

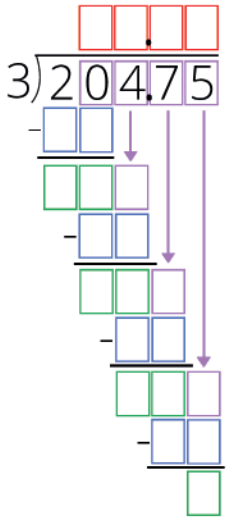
$$\frac{\text{prime factorization of 56}}{\text{prime factorization of 63}} =$$

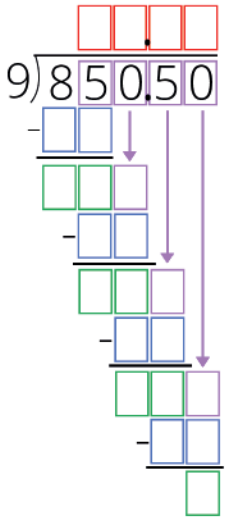


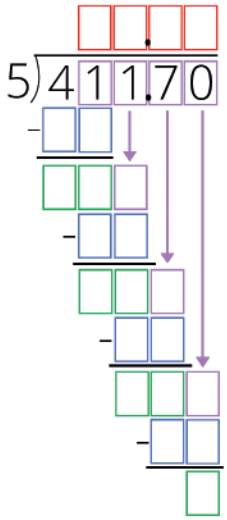
What is the square root of the product of sixteen and nine?

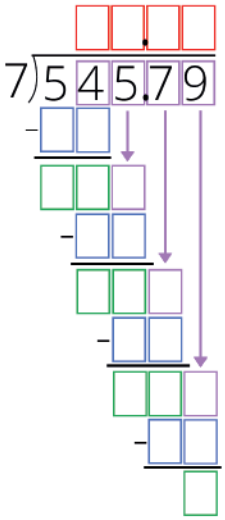
Estimate the product of 189 and 304 by rounding both factors to the nearest hundred before multiplying.

Find the quotients.



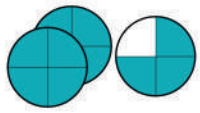


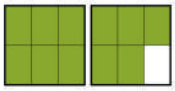


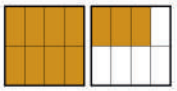


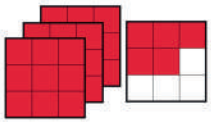
#30 Date_____

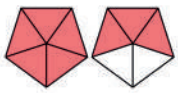
Name these fractions as mixed numbers and improper fractions.

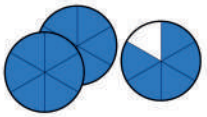

$2\frac{3}{4}$ $\frac{11}{4}$


____ ____


____ ____

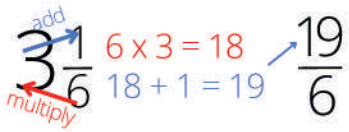

____ ____


____ ____


____ ____

Mixed number to improper fraction.

1. Multiply the denominator of the fraction by the whole number.
2. Add the numerator of the fraction.
3. The denominator remains the same.



$3\frac{1}{6} = \frac{19}{6}$

Improper fraction to mixed number.

1. Divide the numerator by the denominator.

$$6\overline{)19}\quad 3\ \tfrac{1}{6}$$
$$-18$$
$$1$$

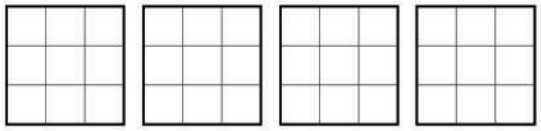
$3\frac{5}{6} = \frac{23}{6}$ $2\frac{1}{2} =$____ $\frac{13}{6} = 2\frac{1}{6}$ $\frac{14}{4} =$____

$2\frac{1}{4} =$____ $1\frac{3}{5} =$____ $\frac{4}{3} =$____ $\frac{14}{5} =$____

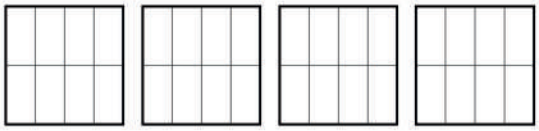
$3\frac{5}{8} =$____ $3\frac{4}{5} =$____ $\frac{18}{8} =$____ $\frac{9}{2} =$____

$1\frac{2}{3} =$____ $2\frac{1}{3} =$____ $\frac{5}{2} =$____ $\frac{7}{3} =$____

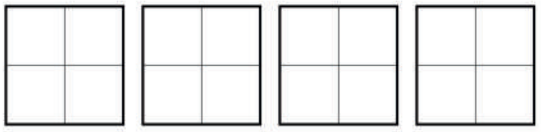
Shade to show that $3\frac{1}{9}$ equals $\frac{28}{9}$.



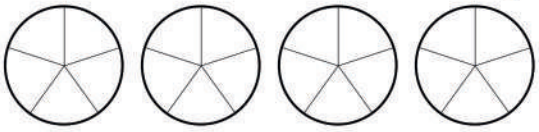
Shade to show that $3\frac{5}{8}$ equals $\frac{29}{8}$.



Shade to show that $3\frac{3}{4}$ equals $\frac{15}{4}$.



Shade to show that $3\frac{3}{5}$ equals $\frac{18}{5}$.



List the first six multiples of:

2, 4, 6, 8, 10, 12, 14

3, 6, 9, 12, 15, 18, 21

4, ___, ___, ___, ___, ___, ___

5, ___, ___, ___, ___, ___, ___

6, ___, ___, ___, ___, ___, ___

9, ___, ___, ___, ___, ___, ___

12, ___, ___, ___, ___, ___, ___

Name the LEAST common multiple (LCM) of:

2 and 3	2 and 4	2 and 5
6	___	___
3 and 4	3 and 5	3 and 6
___	___	___
4 and 5	4 and 8	4 and 12
___	___	___

Add these fractions. You can only add fractions with common denominators.

1. Find the LEAST COMMON MULTIPLE of both denominators.
2. RENAME the fractions. Multiply each of them by ONE, to find their EQUIVALENT fractions.
3. Simplify your answer. No improper fractions.

$\frac{3}{5}+\frac{3}{5}=\frac{6}{5}=1\frac{1}{5}$	$\frac{1^{2}}{4_{8}}+\frac{3}{8}=$	$\frac{1^{3}}{2_{6}}+\frac{1^{2}}{3_{6}}=$	$\frac{1}{4}+\frac{2}{3}=$
$\frac{2}{3}+\frac{1}{5}=$	$\frac{5}{6}+\frac{2}{3}=$	$\frac{1}{2}+\frac{3}{5}=$	$\frac{3}{4}+\frac{1}{5}=$

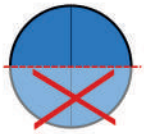
Subtract these fractions. Find a common denominator first.

$\frac{4}{6}-\frac{1}{6}=\frac{3}{6}=\frac{1}{2}$	$\frac{1^{3}}{2_{6}}-\frac{1^{2}}{3_{6}}=$	$\frac{3}{5}-\frac{1}{2}=$	$\frac{4}{5}-\frac{1}{4}=$
$\frac{1}{2}-\frac{4}{9}=$	$\frac{5}{6}-\frac{1}{2}=$	$\frac{3}{4}-\frac{1}{3}=$	$\frac{4}{5}-\frac{2}{3}=$

#31 Date_____

Multiply fractions by fractions. Always simplify!

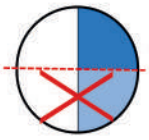
$\frac{4}{4} \times \frac{1}{2} = \frac{4}{8} = \frac{1}{2}$



simplify BEFORE multiplying

$\frac{3}{5} \times \frac{1}{3} = \frac{1}{5}$

$\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$



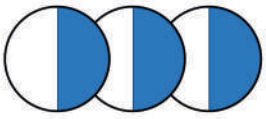
$\frac{4}{5} \times \frac{1}{2} =$ $\frac{3}{4} \times \frac{1}{3} =$ $\frac{1}{2} \times \frac{2}{3} =$ $\frac{3}{8} \times \frac{1}{3} =$

$\frac{2}{5} \times \frac{5}{6} =$ $\frac{2}{9} \times \frac{3}{4} =$ $\frac{1}{8} \times \frac{4}{5} =$ $\frac{3}{5} \times \frac{5}{9} =$

Multiply fractions by WHOLE numbers. Always simplify!

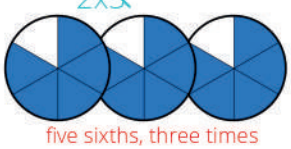
improper fraction

$\frac{1}{2} \times 3 = \frac{3}{1} = \frac{3}{2} = 1\frac{1}{2}$

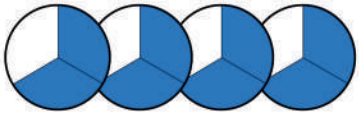


simplify BEFORE multiplying

$\frac{5}{6} \times 3 = \frac{5}{2} = 2\frac{1}{2}$



$\frac{2}{3} \times 4 =$



simplify BEFORE multiplying

$\frac{1}{3} \times 3 =$ $\frac{1}{4} \times 2 =$ $6 \times \frac{1}{4} =$ $\frac{3}{5} \times 2 =$

$\frac{2}{5} \times 5 =$ $4 \times \frac{1}{8} =$ $3 \times \frac{5}{12} =$ $\frac{5}{8} \times 4 =$

Your family drove 1400 miles on a five-day trip to a family reunion. What was the average number of miles your family drove each day?

List the factors of:

10: 1, 2, 5, 10

12: ___, ___, ___, ___, ___, ___

15: ___, ___, ___, ___

18: ___, ___, ___, ___, ___, ___

20: ___, ___, ___, ___, ___, ___

24: ___, ___, ___, ___, ___, ___, ___, ___

Name the greatest common factor (GCF) of:

10 and 15 _____

18 and 24 _____

12 and 15 _____

20 and 24 _____

Rename each fraction in its simplest form. (Divide both numerator and denominator by the GCF)

$\frac{10}{15} \div \frac{5}{5} =$ $\frac{18}{24} \div \frac{6}{6} =$ $\frac{12}{15} \div \frac{3}{3} =$ $\frac{20}{24} \div \frac{4}{4} =$

Find a common denominator, add the fractions then add the mixed numbers.

$1\frac{2}{3} + 2\frac{3}{4}$ $2\frac{1}{4} + 3\frac{1}{2}$ $1\frac{2}{3} + 4\frac{5}{6}$ $3\frac{1}{4} + 2\frac{1}{2}$ $1\frac{7}{8} + 3\frac{1}{4}$

Trace each term. Draw lines to match terms and definitions.

factor

multiple

greatest common factor

least common multiple

common denominator

- the smallest integer divisible by each of the given factors (LCM)
- a shared multiple of the denominators of two fractions
- divides another number evenly
- the product of a number and an integer
- (GCF) the largest factor that divides the given integers evenly

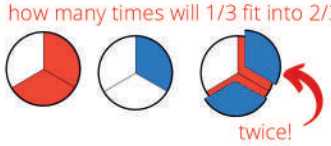
#32 Date_____

Divide fractions by fractions. Always simplify!

Never divide by a fraction, instead multiply by the reciprocal.

$\frac{2}{3} * \frac{3}{1} = \frac{6}{3} = 2$

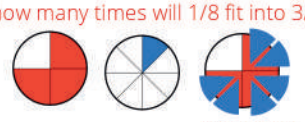
how many times will 1/3 fit into 2/3?



twice!

$\frac{3}{4} * \frac{8}{1} = \_ = \_$

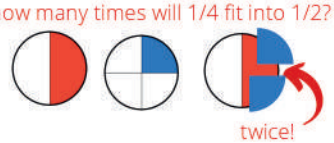
how many times will 1/8 fit into 3/4?



six times!

$\frac{1}{2} \div \frac{1}{4} = \_ = \_$

how many times will 1/4 fit into 1/2?



twice!

$\frac{2}{5} \div \frac{1}{5} =$

$\frac{8}{10} \div \frac{1}{5} =$

$\frac{2}{3} \div \frac{1}{6} =$

$\frac{3}{4} \div \frac{1}{4} =$

Divide whole numbers by fractions. Always simplify!

Never divide by a fraction, instead multiply by the reciprocal.

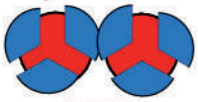
$2 * \frac{2}{1} = \square$

how many times will 1/2 go into 2?

four times!

$2 * \frac{3}{1} =$

how many times will 1/3 fit into 2?



six times!

$3 \div \frac{3}{8} =$

how many times will 3/8 fit into 3?

eight times!

$4 \div \frac{2}{5} =$

$1 \div \frac{5}{6} =$

$2 \div \frac{7}{8} =$

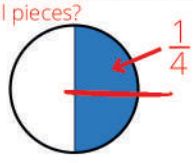
$1 \div \frac{1}{4} =$

Divide fractions by whole numbers. Always simplify!

Multiply by the reciprocal.

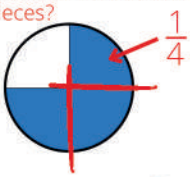
$\frac{1}{2} * \frac{2}{1} = \square$

How much is ½ divided into two equal pieces?



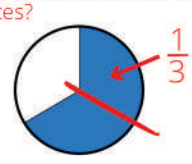
$\frac{3}{4} * \frac{3}{1} =$

how much is ¾ divided into three equal pieces?



$\frac{2}{3} * \frac{2}{1} =$

How much is ⅔ divided into two equal pieces?



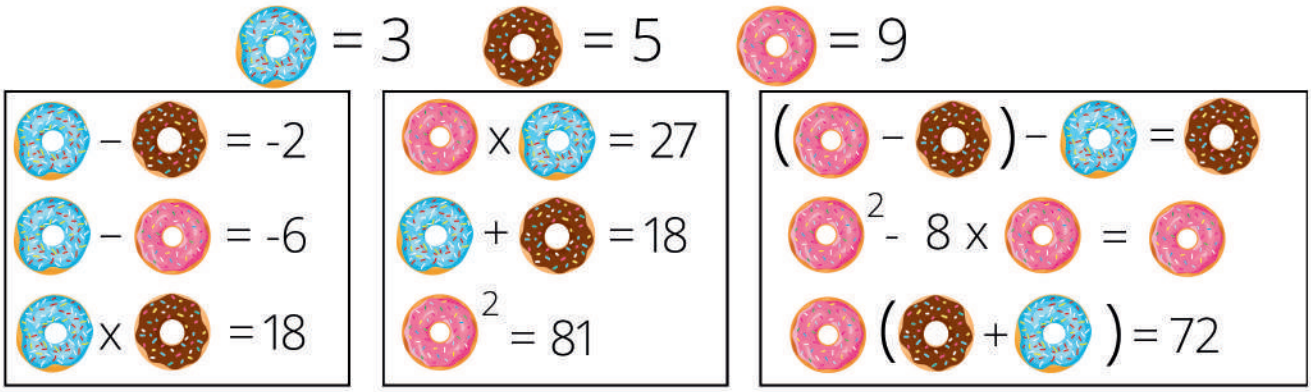
$\frac{2}{5} \div 2 =$

$\frac{1}{2} \div 5 =$

$\frac{2}{3} \div 4 =$

$\frac{6}{8} \div 3 =$

Each group contains two truths and a lie. Circle the LIE in each group. Follow the order of operations (PEMDAS). (3.83)



You shared a chocolate bar equally with your brother. He gave half of what you gave him to his friend. What fraction did the friend get?

What percentage is that?

Trace then write each term, then draw a line to match each term to its definition. (3.59)

coefficient

variable

- A letter or symbol that represents a number.
- A number in front of a variable. It gets multiplied by the variable.

coefficient variable A = 4

5A = 20

Math Rule:
When you have a VARIABLE and a COEFFICIENT together in a number sentence, they are multiplied together. You don't need a multiplication symbol.

Fill in the missing factors or products to complete each number sentence.

7 x ☐ = 56

4 x ☐ = 28

6 x ☐ = 48

5 x ☐ = 45

3 x ☐ = 36

Find the value of the VARIABLE in each number sentence.

See? No multiplication symbol between the variable and the coefficient!

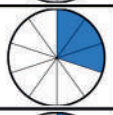
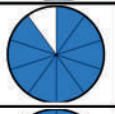
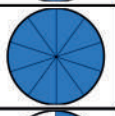
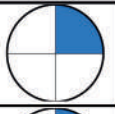
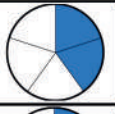
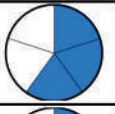
Color the COEFFICIENTS red and the VARIABLES green in these number sentences.

7X = 56	X = ____
4Y = 28	Y = ____
6Z = 48	Z = ____
5A = 45	A = ____
3B = 36	B = ____

#33 Date_____

Complete the chart.

- To convert a fraction to a decimal, divide the numerator by the denominator.
- To convert a decimal to a percent, multiply it by 100.
- Use shortcuts when the denominator is ten or a factor of ten.

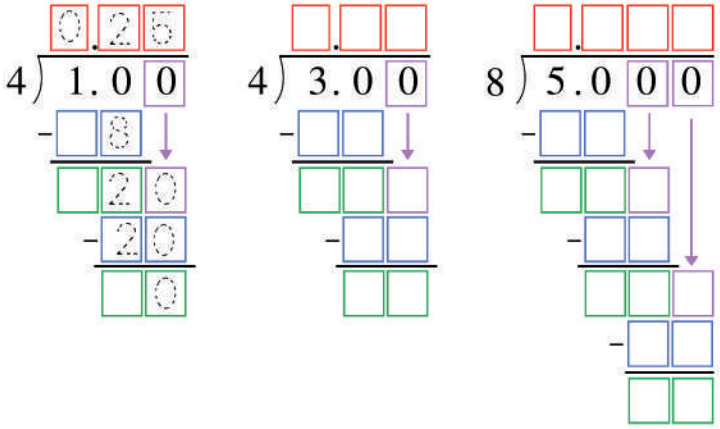
Visual Fraction	Numerical Fraction	Decimal	Percent
	$\frac{1}{10}$	0.1	10%
			
			
			
			
			
			
			
			
	$\frac{1}{2}$		
			
			
			
			

These denominators are factors of ten so we can easily rename them.

$\frac{1}{5}\overset{\times 2}{=}\frac{}{10}$ $\frac{2}{5}\overset{\times 2}{=}\frac{}{10}$ $\frac{3}{5}\overset{\times 2}{=}\frac{}{10}$

$\frac{1}{2}\overset{\times 5}{=}\frac{}{10}$

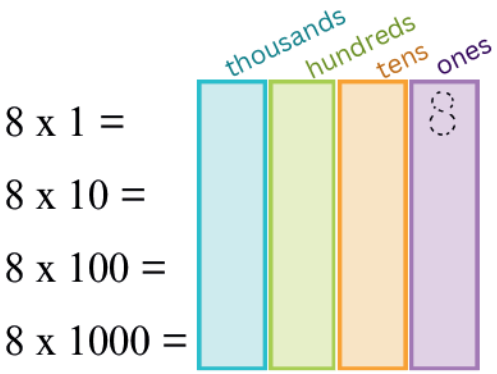
These denominators are not factors of ten so we have to divide the numerator by the denominator.

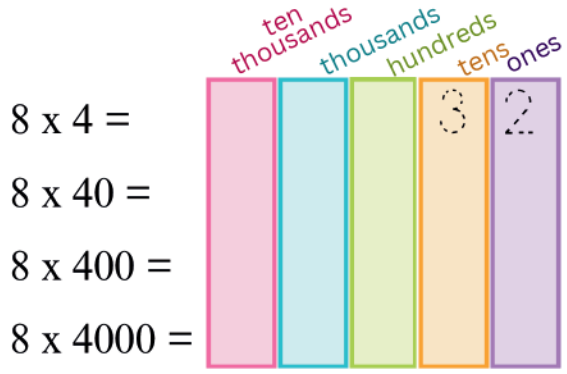


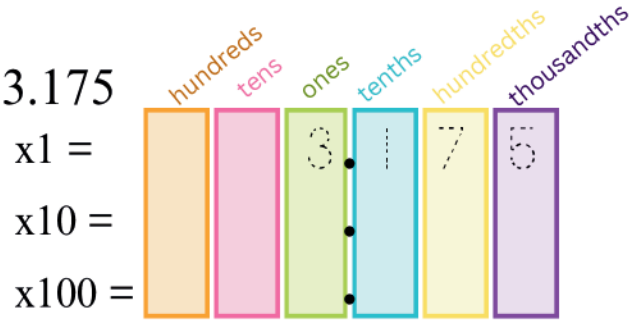
How much is $\frac{2}{3}$ of one dozen?

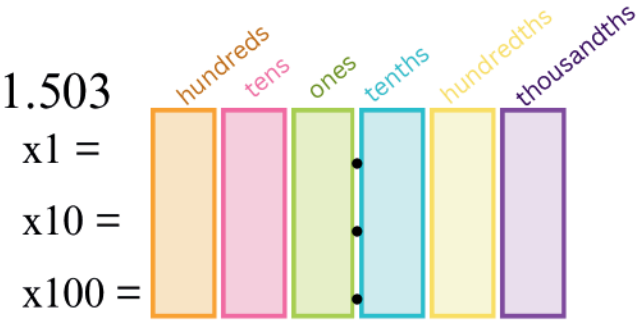
Estimate the product of 51 and 38 by rounding the numbers to the nearest ten before you multiply.

What is the product of $\frac{2}{3}$ and its reciprocal?









Find the products. (5.12)

12 x 10 = _____ 12 x 30 = _____ 12 x 50 = _____

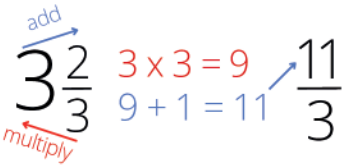
12 x 100 = _____ 12 x 300 = _____ 12 x 500 = _____

12 x 1000 = _____ 12 x 3000 = _____ 12 x 5000 = _____

3.377 x 10 = _____ 52.13 x 10 = _____

3.377 x 100 = _____ 52.13 x 100 = _____

3.377 x 1000 = _____ 52.13 x 1000 = _____



Divide and shade circles to show that $3\frac{2}{3}$ equals $\frac{11}{3}$.

#34 Date_____

To which decimal number does each arrow point?

a 6.4 c _____ e _____ g _____ i _____

b _____ d _____ f _____ h _____ j _____

Use comparison symbols (<, >, =) to compare these decimal numbers.

0.008 < 0.8	0.03 ○ 0.3	0.6 ○ 0.06
0.2 ○ 0.02	0.04 ○ 0.04	0.1 ○ 0.1
0.05 ○ 0.005	0.009 ○ 0.09	0.07 ○ 0.007

WORD PROBLEMS

quantity means parentheses

2(7 + 5) =

What is twice the quantity of seven and five?

What is three eighths of sixty-four?

A dime is what fraction of a dollar? What decimal? What percent?

Write the mixed numbers as decimals.

$3\frac{9}{10}$ = 3.9 $3\frac{9}{100}$ = 3.09 $3\frac{9}{1000}$ = 3.009

$1\frac{125}{1000}$ = _____ $5\frac{53}{100}$ = _____ $1\frac{2}{1000}$ = _____

$5\frac{9}{10}$ = _____ $2\frac{3}{10}$ = _____ $4\frac{4}{100}$ = _____

Find the sums and differences. Find a common denominator. Remember to simplify!

$\frac{1}{2} + \frac{1}{4} = \frac{3}{4}$ $\quad \frac{1}{2} - \frac{1}{3} =$ $\quad \frac{1}{3} + \frac{3}{4} =$ $\quad \frac{4}{5} - \frac{1}{2} =$

Find the products. Multiply straight across. Always simplify!

Simplify BEFORE multiplying whenever you can.

$\frac{1}{2} \times \frac{3}{4} = \frac{1}{4}$ $\quad \frac{1}{3} \times \frac{3}{5} =$ $\quad \frac{1}{2} \times \frac{1}{4} =$ $\quad 2 \times \frac{1}{2} =$

$\frac{1}{3} \times 3 =$ $\quad \frac{1}{4} \times \frac{4}{5} =$ $\quad \frac{4}{5} \times \frac{3}{4} =$ $\quad \frac{3}{8} \times \frac{4}{5} =$

Find the quotients. Always simplify!

Simplify BEFORE multiplying whenever you can.

Never divide by a fraction, instead multiply by the reciprocal.

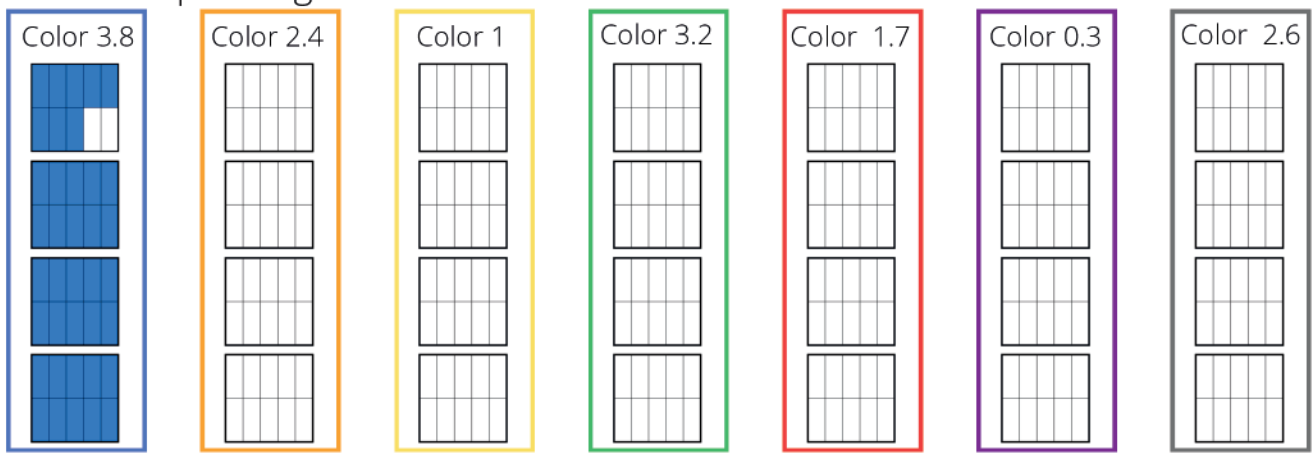
$\frac{3}{5} * \frac{5}{3} = 3$

How many times will 1/5 go into 3/5?

$\frac{1}{4} \div \frac{3}{4} =$ $\quad 3 \div \frac{1}{3} =$ $\quad \frac{1}{2} \div \frac{1}{4} =$

$6 \div \frac{1}{2} =$ $\quad \frac{5}{8} \div \frac{1}{4} =$ $\quad \frac{5}{6} \div 5 =$ $\quad \frac{7}{12} \div \frac{1}{3} =$

Color the decimal number in each colored rectangle. Then draw an arrow that color pointing to the number on the number line below.



#35 Date_____

FUNCTION MACHINE

Send each x value through the function machine. Figure out each function rule and complete the y column of the function table.

$y=3x$

x	y
1	3
2	6
3	9
4	12
5	15
6	18

$y=x+2$

x	y
1	3
2	4
3	5
4	
5	
6	

x	y
1	0
2	1
3	2
4	3
5	
6	

x	y
1	2
2	3
3	4
4	5
5	
6	

x	y
1	2
2	4
3	6
4	8
5	
6	

x	y
1	0
2	0
3	0
4	
5	
6	

Use the provided function to complete the outputs in the y column.

$y = 10x$

x	y
1	10
2	20
3	30
4	40
5	
6	
7	
8	
9	
10	

$y = x/2$

x	y
1	1/2
2	1
3	
4	
5	
6	
7	
8	
9	
10	

$y = x-5$

x	y
1	-4
2	-3
3	
4	
5	
6	
7	
8	
9	
10	

$y = x^2$

x	y
1	1
2	4
3	
4	
5	
6	
7	
8	
9	
10	

$y = x/10$

x	y
1	0.1
2	0.2
3	
4	
5	
6	
7	
8	
9	
10	

$y = 2x-1$

x	y
1	2
2	3
3	5
4	
5	
6	
7	
8	
9	
10	

WORD PROBLEMS

What is the square root of the sum of seven and nine?

What is four fifths of 45?

How many dimes is fifty percent of a dollar?

Convert these mixed numbers to decimals. Rename the fractional part with a denominator of ten or one hundred.

$3\frac{1}{2}$ = 3.5

1x10=10 2x?=10

$\frac{1}{2} = \frac{5}{10}$

$1\frac{1}{3}$ =

$2\frac{3}{4}$ =

$4\frac{1}{4}$ =

$1\frac{2}{5}$ =

2x10=20 5x?=20

$\frac{2}{5} = \frac{10}{10}$

$2\frac{3}{8}$ =

$3\overline{)1.000}$ = 0.333 (-9, 10, -9, 10, -9, 1)

$8\overline{)3.000}$ = 0.375 (-24, 60, -56, 40, -40, 0)

Fill in the missing factors or products to complete each number sentence.

5 x ☐ = 20

7 x ☐ = 56

8 x ☐ = 72

6 x ☐ = 48

8 x ☐ = 32

7 x ☐ = 49

6 x ☐ = 42

Color the COEFFICIENTS red and the VARIABLES green in these number sentences.

No multiplication symbols are needed between the variable and the coefficient!

Find the value of the VARIABLE in each number sentence.

5A = 20	A = ____
7B = 56	B = ____
8C = 72	C = ____
6X = 48	X = ____
8Y = 32	Y = ____
7Z = 49	Z = ____
6T = 42	T = ____

How many dimes are in $4.00?

How many quarters are in $4.00?

If 3 toothbrushes cost $2.55, how much will 4 toothbrushes cost?

#36 Date_____

Draw a picture to help you solve each word problem.

The coach organized 48 players into 8 teams with the same number of players on each team. How many players are on each team?

The bike you want costs $497.57. You have $112.08 in your bank and you just earned $55 babysitting. How much do you still need?

You bought five movie tickets for $14.35 each. How much did you spend?

Each package of fruit snacks holds 6 pieces. A box has 24 packages. How many pieces are in each box?

How many years is five centuries?

Your dad caught ⅓ of a dozen fish and you caught two fish. How many did you catch altogether?

If 1 pie is shared equally between 5 people, each person will get what fraction of the pie?

You are going to run a 13-mile relay race with three friends. If you divide the distance equally, how many miles (mixed number) will you each run?

Order these numbers from smallest to largest. (5.34)

13.4	14.3	1.34	1.43
_____ smallest	_____	_____	_____ largest
2.71	7.12	1.27	1.72
_____ smallest	_____	_____	_____ largest
5.37	5.73	5.07	5.007
_____ smallest	_____	_____	_____ largest

Compare these numbers (<, >, =)

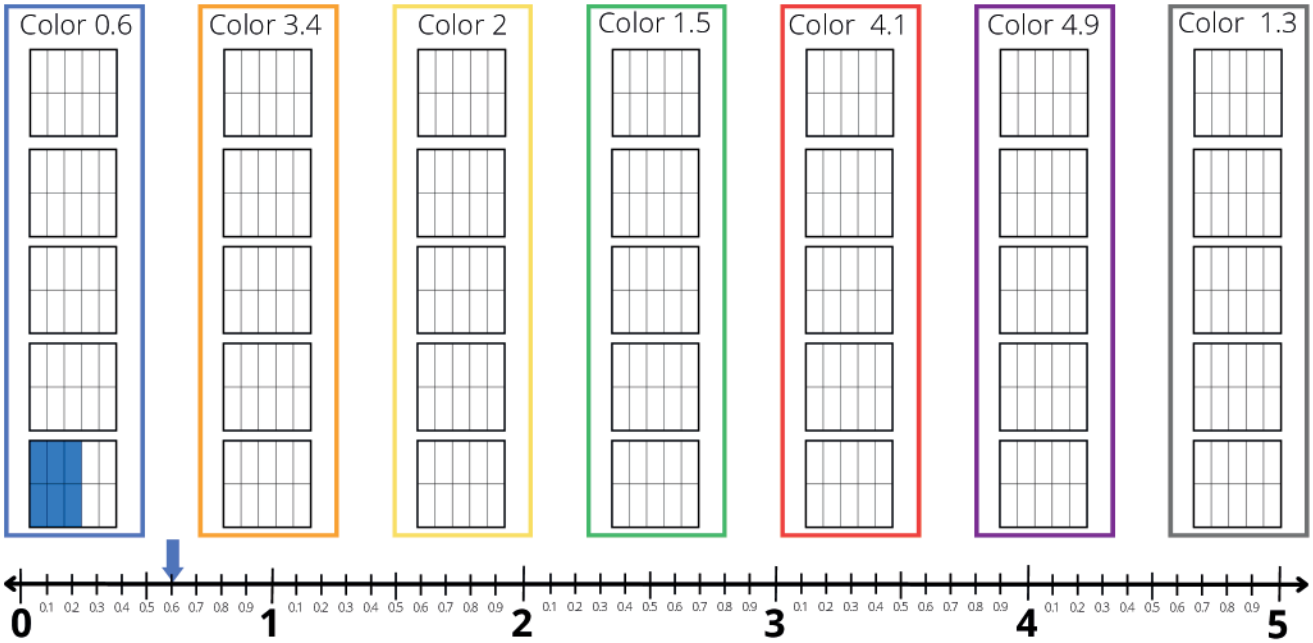
1.251	12.51
8.244	8.245
23.417	23.471
7.191	7.119
5.215	52.15
2.684	26.84

FAMILY SUPER SUNDAES

each scoop of ice cream	$1.29
whipped cream	$0.99
sauce (chocolate, caramel)	$0.78
cookie	$0.59
waffle cone	$1.05
waffle bowl	$1.99

Figure out the cost of your order:
3 scoops of ice cream in a waffle bowl, topped with whipped cream and chocolate sauce, with 2 cookies.

Color the decimal number in each colored rectangle. Then draw an arrow that color pointing to the number on the number line below. (4.35)



#37 Date_____

Draw a picture to help you solve each word problem.

Peter was 14-years-old, Edmund was 3 years younger than Peter and Lucy was two years younger than Edmund. If Susan was 4 years older than Lucy, how old was she?

The White Witch gave Edmund and Lucy 30 pieces of turkish delight each. They wanted to share the candy with Susan. How many pieces did they each get if they divided the candy equally between three people?

The bench was 8 miles from the lamp post. It was one fourth of the way from the lamp post to Cair Paravel. What was the distance from the lamp post to Cair Paravel?

Playing hide-and seek, Lucy had to search 18 rooms. If Edmund shared the job equally with her, how many rooms did each of them search?

The stone table was made of 125 stones in three colors: grey, brown and white. If there were 48 grey stones and 34 brown stones, how many white stones did the table contain?

The door in the back of the wardrobe was 18 inches wide by 36 inches tall. What was its area?

If each of the Pevensie children had two pairs of shoes in the wardrobe, how many individual shoe were there?

One eighth of the 72 trees in the forest were not covered in snow. How many of the trees were covered in snow? What fraction of the trees were covered?

Use the menu prices to add up the cost of each meal. Find each customer's change if they pay with a $20.00 bill. Line up the decimals! (4.39)

SANDWICH TRUCK

Club	$4.49
BLT	$4.89
Ham	$3.75
Cheese	$4.99
Veggie	$3.98
Fries	$3.77
Soda	$2.79
Ice cream	$4.54

4.89
3.77
\+ 2.79

20.00

BLT, fries soda

Soda, club sandwich

Soda, veggie sandwich, ice cream

Draw two horizontal line segments, parallel to each other. Draw two oblique line segments, parallel to each other, crossing both horizontal line segments. Color the bounded area. What shape did you draw? Name it two ways.

Draw a pair of horizontal, parallel line segments. Make the lower segment longer. Connect the ends of the segments with oblique line segments, to make a shape. Name it two ways.

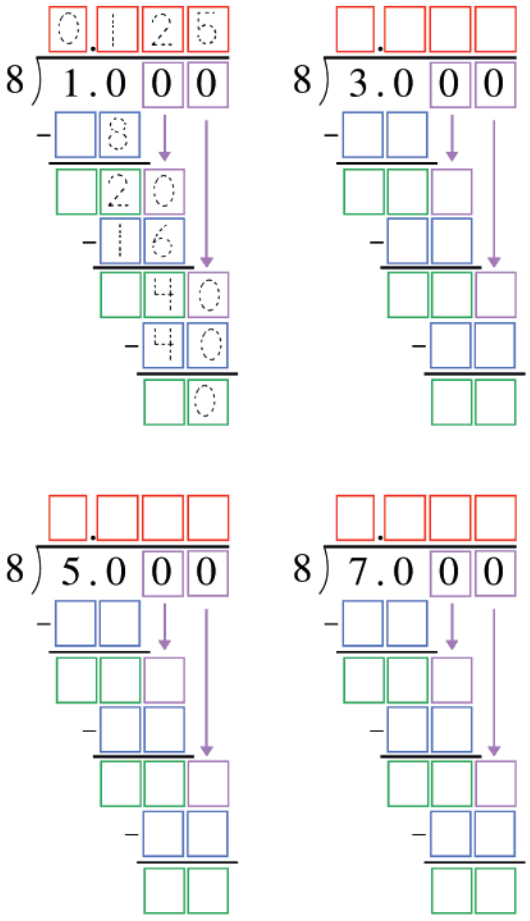
#38 Date_____

Color the fraction circles. Convert each fraction to its decimal and percent. Round decimals to the hundredth place. Use whole number percentages.

Is the denominator a factor of 10 or 100?

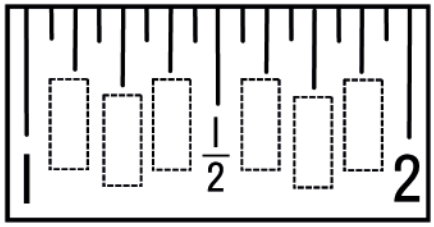
No. Divide the numerator by the denominator.

Yes. Use the butterfly method to rename it.



Visual Fraction		Decimal	Percent
	1/8	0.13	13%
	1/4		
	3/8		
	1/2		
	5/8		
	3/4		
	7/8		
	8/8		

Add the missing fractions to this section of ruler.



Draw a quadrilateral with one pair of horizontal line segments and one pair of vertical line segments. What is it called?

A playing field that has an area of 500 square yards is 100 yards long. How wide is it?

What is its perimeter?

A yard is 3 feet. A foot is 12 inches. How many inches is one fourth of a yard? What percent of 1 yd. is that?

Write the largest odd number possible using the digits 4, 5 and 7 once each.

Add or subtract. Then convert both fractions to decimals and add or subtract.

$\frac{1}{2} + \frac{1}{4} = \frac{3}{4}$ $\quad \begin{array}{r} 0.5 \\ +0.25 \\ \hline 0.75 \end{array}$

$\frac{3}{4} - \frac{1}{2} =$

Both denominators are factors of 10 $\frac{4}{5} - \frac{1}{2} =$

0.5 + 0.25 = 0.75

____ - ____ = ____

____ - ____ = ____

$\frac{3}{5} + \frac{1}{10} =$

$\frac{3}{4} + \frac{1}{2} =$

$\frac{7}{10} - \frac{1}{2} =$

____ + ____ = ____

____ + ____ = ____

____ - ____ = ____

Find the products. Multiply straight across. Always simplify!

Simplify BEFORE multiplying whenever you can.

$\frac{3}{5} \times \frac{5}{8} = \frac{3}{8}$ $\quad \frac{1}{2} \times \frac{2}{5} =$ $\quad \frac{1}{5} \times 4 =$ $\quad \frac{1}{3} \times \frac{1}{2} =$

$\frac{2}{5} \times \frac{3}{4} =$ $\quad 1 \times \frac{1}{2} =$ $\quad \frac{1}{2} \times \frac{4}{5} =$ $\quad \frac{3}{8} \times \frac{4}{5} =$

Find the quotients. Always simplify!

Simplify BEFORE multiplying whenever you can.

Never divide by a fraction, instead multiply by the reciprocal.

$\frac{3}{8} * \frac{4}{1} = \frac{3}{2} = 1\frac{1}{2}$ $\quad \frac{1}{4} \div \frac{3}{4} =$ $\quad \frac{5}{8} \div \frac{1}{4} =$ $\quad \frac{3}{12} \div \frac{1}{4} =$

2 x 4

How many times will 1/4 go into 3/8?

$6 \div \frac{1}{2} =$ $\quad \frac{5}{6} \div 5 =$ $\quad 1 \div \frac{1}{3} =$ $\quad \frac{3}{4} \div 2 =$

#40 Date_____

Write each amount of money in two forms:

Nineteen cents

_____ _____

One dollar and two cents

_____ _____

Your mom bought 7 cans of black beans for 89 cents each. What was the cost of all 7 cans? Write the product in both forms.

What is the total cost of a $12.85 book and a $1.74 notebook.

What is the total price of 4 cartons of ice cream that cost $3.20 each?

How many cents is 3/5 of a dollar?

Rewrite these amounts in dollar form and stack them, lining them up by decimal point, to add.

$9.47 + $0.35 + 18¢ + $11.99 + 3¢ + $15

Choose three toys to buy. Write the amounts in dollar form and stack the prices, lining up the decimal points, to add them. How much change will you get if you pay with a $20?

You rode your bike two miles in 15 minutes. It took your mom 20 minutes to ride the same distance. Who is faster?

Your friend skated 24 laps at the rink while you skated 21. Who skated faster?

Add or subtract. Then convert both fractions to decimals and add or subtract.

$\frac{\cancel{1}2}{5\cancel{0}} + \frac{\cancel{1}5}{2\cancel{0}} = \frac{7}{10}$ $\quad$ $0.2 + 0.5 = 0.7$

$\frac{3}{5} - \frac{1}{2} =$ $\quad$ $\frac{4}{5} + \frac{1}{2} =$

0.2 + 0.5 = 0.7 $\quad$ ____ - ____ = ____ $\quad$ ____ + ____ = ____

Find the correct operator (+, -, x, ÷) to make each number sentence true.

$\frac{3}{5} \times \frac{5}{8} = \frac{3}{8}$ $\quad$ $\frac{1}{3} \bigcirc \frac{2}{3} = \frac{1}{2}$ $\quad$ $\frac{1}{5} \bigcirc \frac{1}{5} = \frac{2}{5}$ $\quad$ $\frac{1}{2} \bigcirc \frac{1}{3} = \frac{1}{6}$

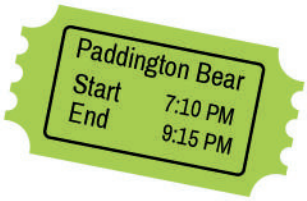
$3 \bigcirc \frac{1}{2} = 6$ $\quad$ $3 \bigcirc \frac{1}{2} = 1\frac{1}{2}$ $\quad$ $3 \bigcirc \frac{1}{2} = 2\frac{1}{2}$ $\quad$ $3 \bigcirc \frac{1}{2} = 3\frac{1}{2}$

$\frac{2}{3} \bigcirc \frac{1}{4} = \frac{5}{12}$ $\quad$ $\frac{2}{3} \bigcirc \frac{1}{4} = \frac{11}{12}$ $\quad$ $\frac{2}{3} \bigcirc \frac{1}{4} = \frac{1}{6}$ $\quad$ $\frac{2}{3} \bigcirc \frac{1}{4} = 2\frac{2}{3}$

#41 Date_____

30 minutes earlier	15 minutes earlier	current time	15 minutes later	30 minutes later
2:00	2:15	2:30	2:45	3:00
:	:	3:20	:	:
:	:	12:15	:	:

How long is your movie?



time	hours	minutes
7:10 PM		50
8:00 PM	1	
9:00 PM		15
9:15 PM		

65 minutes

Are there more than 60 minutes?
If so, TRADE 60 minutes for 1 hour.

2 hours and 5 minutes

How long is your flight?

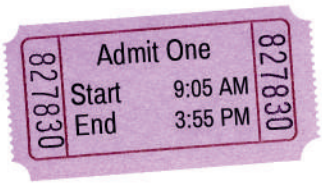
time	hours	minutes
7:20 AM		
4:45 PM		

_____ minutes

Are there more than 60 minutes?
If so, TRADE 60 minutes for 1 hour.

_____ hours and _____ minutes

How long is your field trip?



time	hours	minutes
9:05 AM		
3:55 PM		

_____ minutes

Are there more than 60 minutes?
If so, TRADE 60 minutes for 1 hour.

_____ hours and _____ minutes

Standard coin rolls contain: 40 quarters, 50 dimes, 40 nickels and 50 pennies.

You filled 14 rolls with your quarter collection, and you had 17 quarters leftover. How many quarters do you have?

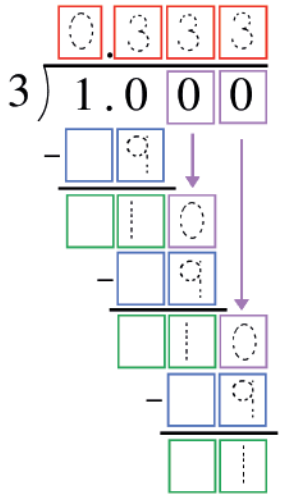
Granny emptied her coin jar to deposit the money. She filled 4 rolls with quarters, 1 roll with dimes, 1 roll with nickels and 3 rolls with pennies. How much money did she deposit?

How much money is that?

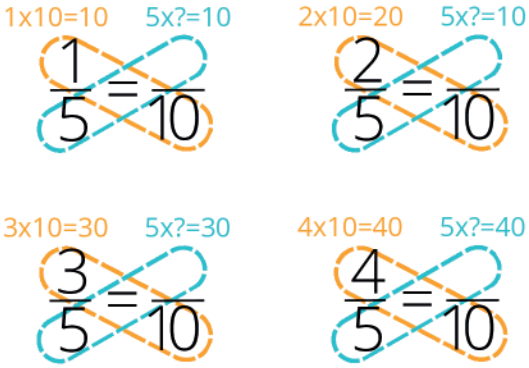
Convert each fraction to its decimal and percent. Round decimals to the hundredth place. Use whole number percentages. (5.33)

Is the denominator a factor of 10 or 100?

No. Divide the numerator by the denominator.



Yes. Use the butterfly method to rename it.



Visual Fraction		Decimal	Percent
	$\frac{1}{5}$	0.2	20%
			
			
			
			
			

Use the provided function to complete the outputs in the y column. (5.35)

y = x/3

x	y
3	1
6	2
9	3
12	
15	
18	

y = 2x

x	y
3	6
5	
7	
9	
11	
13	

y = 2x-2

x	y
20	38
4	
14	
12	
8	
2	

$y = x^2$

x	y
10	100
7	
9	
4	
8	
6	

y = x/10

x	y
25	2.5
19	
9	
91	
4	
50	

y = 5x-1

x	y
9	44
4	
5	
7	
6	
12	

You can swim 20 meters in half a minute. Your sister can swim 50 meters in one minute. Who swims faster?

You read 50 pages of your book in ten minutes. Your sister read 70 pages of the same book in twenty minutes. Who reads faster?

#42 Date_____

Use the compass in the corner of the playground map to answer these questions:

If you are in the sandbox, what direction do you have to go to swing? _____

Walk East from the swings to play. What are you doing now? _____

What direction should you walk to eat lunch at a picnic table? _____

Walk West after lunch. What happens? _____

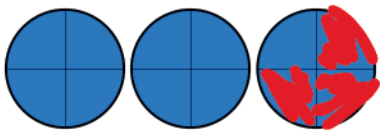
Climb a tree next to the river to dry off. In what direction can you watch a monkey? _____

You want to be a monkey, too. What direction do you walk to play on the monkey bars? _____

Walk south. What equipment are you playing on now? _____

You want to buy a pail and shovel for the sandbox. It costs $10.73. You have $4.38. How much more money do you need to earn?

Add and subtract fractions and whole numbers. Draw pictures if it helps.(5.29)



$3\frac{12}{4} - \frac{3}{4} = \frac{9}{4} = 2\frac{1}{4}$

$\frac{3}{8} - \frac{1}{4} =$

$\frac{1}{2} + \frac{5}{6} =$

$2 - \frac{2}{5} =$

$3 + \frac{1}{3} =$

$1 - \frac{3}{4} =$

$\frac{5}{9} - \frac{1}{3} =$

$\frac{1}{2} + \frac{3}{5} =$

$2 - \frac{2}{3} =$

$1 + \frac{1}{4} =$

$2 - \frac{4}{5} =$

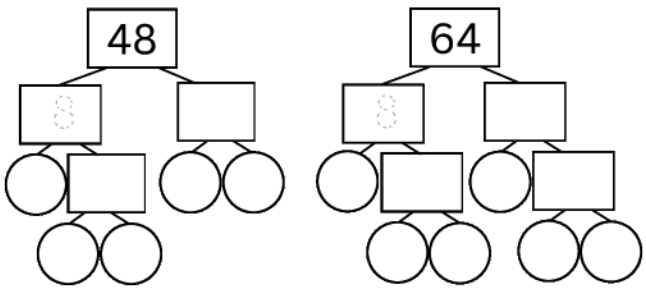
$\frac{2}{3} - \frac{1}{2} =$

List the **factors** of 48: ___, ___, ___, ___, ___, ___, ___, ___, ___, ___

List the **factors** of 64: ___, ___, ___, ___, ___, ___, ___

What is the Greatest Common Factor (GCF) of 48 and 64? _____

Factor the number in the top box of each factor tree. (5.24)



prime factorization: _____

prime factorization: _____

Reduce this fraction to its simplest form two different ways.

$\frac{48}{64}$ $\qquad \frac{48 \div \text{GCF}}{64 \div \text{GCF}} =$

Cancel common factors from the numerator and denominators.

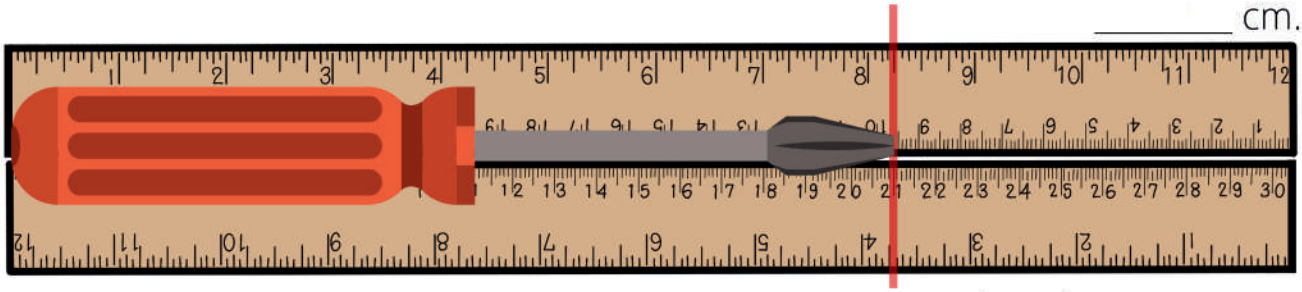
$\frac{\text{prime factorization of 48}}{\text{prime factorization of 64}} =$

#43 Date_____

Measure each item in both in. and cm. Write amounts in fractions or decimals.
Remember to start from zero on both sides of the ruler.

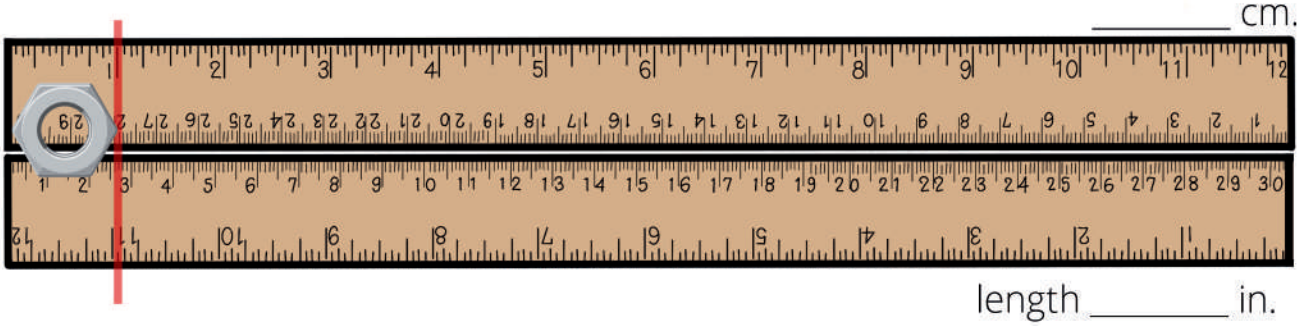
screwdriver length _____ in.

_____ cm.



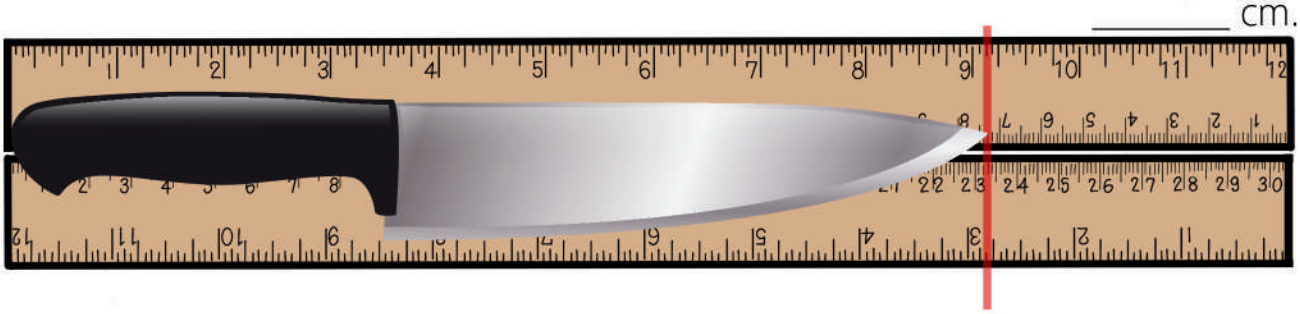
length _____ in.

_____ cm.



length _____ in.

_____ cm.



Use a ruler to measure these line segments in customary and metric units.
Use decimals.

_____ 5.5 in. 14 cm.

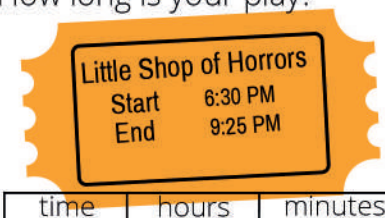
_____ _____ _____

Draw a rectangle with sides all the same length.
Can you think of two other names for this shape?

Road trip! We have tons of snacks and we are driving from Minneapolis, Minnesota to Dallas, TX. They are in the same time zone. We are leaving at 9:30 a.m.. My maps app says it should take 11 hours and 41 minutes. What time should we arrive?

Note: the date of arrival is a day later than the date of departure. Disregard time zone changes.

How long is your play?



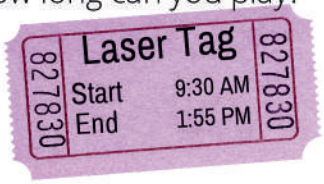
time	hours	minutes
6:30 PM		
9:25 PM		

_____ minutes

Are there more than 60 minutes? If so, TRADE 60 minutes for 1 hour.

_____ hours and _____ minutes

How long can you play?



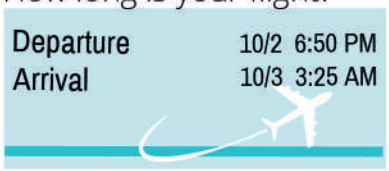
time	hours	minutes
9:30 AM		
1:55 PM		

_____ minutes

Are there more than 60 minutes? If so, TRADE 60 minutes for 1 hour.

_____ hours and _____ minutes

How long is your flight?



time	hours	minutes
6:50 PM		
3:25 AM		

_____ minutes

Are there more than 60 minutes? If so, TRADE 60 minutes for 1 hour.

_____ hours and _____ minutes

Use the provided function to complete the outputs in the y column. (5.35)

$y = x^2+1$

x	y
12	145
5	
4	
8	
6	
10	

$y = x/100$

x	y
2	0.02
75	
13	
37	
22	
46	

$y = 3x-2$

x	y
12	34
5	
6	
9	
7	
3	

$y = 8x-5$

x	y
7	51
11	
5	
8	
6	
4	

$y = \sqrt{x}$

x	y
1	1
25	
16	
81	
9	
36	

$y = 5x$

x	y
3	15
8	
12	
9	
4	
5	

#44 Date_____

Convert these **US Customary** units of length.

12 in = 1 ft
3 ft = 1 yd
5280 ft = 1 mi

2 ft = _____ in

3 ft = _____ in

54 ft = _____ yd

2 mi = _____ ft

54 yd = _____ ft

3 yd = _____ in

How many cm is ¾ of one meter?

What is the sum of two and three tenths and three and five tenths?

Convert these **metric** length units.

kilo	hecta	deca	base unit	deci	centi	milli
1000 m = 1 km	100 m = 1 hm	10 m = 1 dam	meter	1 m = 10 dm	1 m = 100 cm	1 m = 1000 mm

25 m = _____ mm

$25\ \text{m}\left(\frac{1000\ \text{mm}}{1\ \text{m}}\right) = 25000\ \text{mm}$

2 m = _____ mm

800 cm = _____m

$800\ \text{cm}\left(\frac{1\ \text{m}}{100\ \text{cm}}\right) =$

200 cm = _____m

9.1 km = _____ m

$9.1\ \text{km}\left(\frac{1000\ \text{m}}{1\ \text{km}}\right) =$

3 km = _____ m

12 m = _____ cm

$12\ \text{m}\left(\frac{1\ \text{cm}}{\text{m}}\right) =$

45 m = _____ cm

2 m = _____ mm

$2\ \text{m}\left(\frac{1\ \text{mm}}{\text{m}}\right) =$

16 m = _____ cm

19 km = _____ m

$19\ \text{km}\left(\frac{1\ \text{m}}{\text{km}}\right) =$

5000 mm = _____ m

21 cm = _____ m

$21\ \text{cm}\left(\frac{1\ \text{m}}{\text{cm}}\right) =$

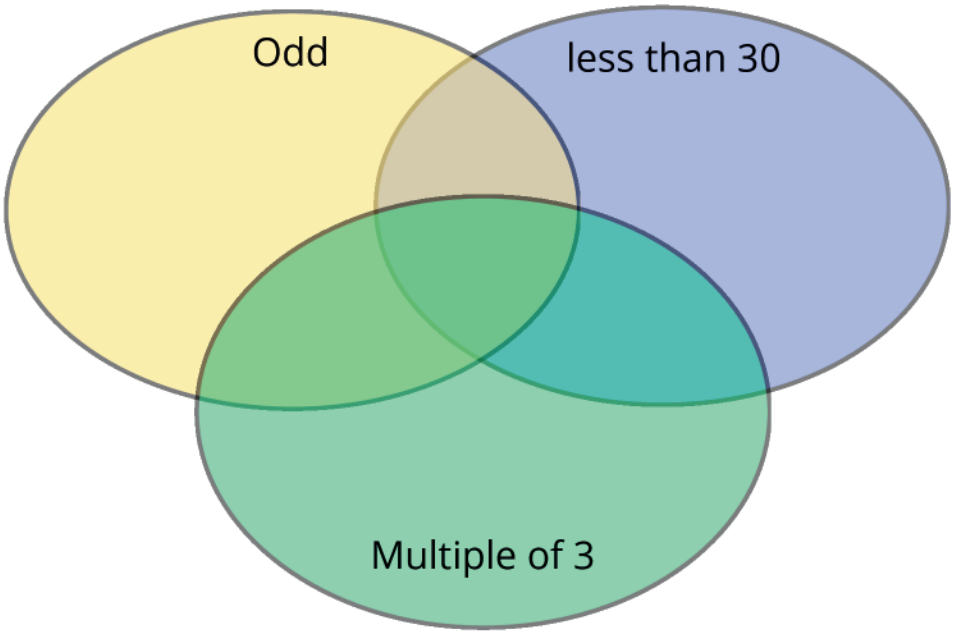
100 cm = _____ m

14 m = _____ km

$14\ \text{m}\left(\frac{1\ \text{km}}{\text{m}}\right) =$

1 m = _____ km

Find the correct space for each number in this Venn diagram. Cross out numbers as you use them. Circle any leftover numbers that don't have fit into the diagram. (3.30)



18	12
45	24
30	25
6	9
52	13
35	36
3	27
21	10
19	59
33	15
2	39
55	99

Tennis balls come in plastic tubes of 3 balls. Each box holds 12 plastic tubes. Each pallet holds 144 boxes. How many tennis balls are on each pallet?

If you bought 4 pounds of grapes for $5.48, what was the cost per pound?

You paid $20 for a movie ticket and got $7.51 change. How much was your ticket?

You bought popcorn and soda for $3.37 each. How much money do you have now?

#45 Date_____

Convert these **US Customary** units to **Metric** units of length. 1 in = 2.54 cm

53 in = _____ m $\quad 53\,\text{in}\left(\frac{2.54\,\text{cm}}{1\,\text{in}}\right)\left(\frac{1\,\text{m}}{100\,\text{cm}}\right) = 1.35\text{m}$

2.54
x 53
762
12700
134.62cm

divide by 100 1.35m

1 ft = _____ cm $\quad 1\,\text{ft}\left(\frac{12\,\text{in}}{1\,\text{ft}}\right)\left(\frac{2.54\,\text{cm}}{1\,\text{in}}\right) =$

1 yd = _____ m $\quad 1\,\text{yd}\left(\frac{\text{ft}}{\text{yd}}\right)\left(\frac{\text{in}}{\text{ft}}\right)\left(\frac{\text{cm}}{\text{in}}\right)\left(\frac{\text{m}}{\text{cm}}\right) =$

convert to inches

5' 1" = _____ cm $\quad \text{in}\left(\frac{\text{cm}}{\text{in}}\right) =$

A basketball player is 6' 9". How tall is he in meters?

First, how many total inches is 6 feet and 9 inches?

$$\text{in}\left(\frac{\text{cm}}{\text{in}}\right)\left(\frac{\text{m}}{\text{cm}}\right) =$$

Most African elephants weigh about 4 tons. How many pounds is that?

128 oz = 1 gal

There are 64 people attending your family reunion. You are in charge of the picnic. You figure each person will want 2 glasses (12 oz. each) of lemonade. How many gallons of lemonade should you buy?

Convert to the BASE UNIT (meter) and then to the desired unit. (Multiply by one, TWICE, if needed)

kilo	hecta	deca	base unit	deci	centi	milli
1000 m = 1 km	100 m = 1 hm	10 m = 1 dam	meter	1 m = 10 dm	1 m = 100 cm	1 m = 1000 mm

9 m = _____ cm

Two zeroes larger; move the decimal two places to the right.

$9\ \cancel{m}\left(\frac{100\ cm}{1\ \cancel{m}}\right) = 9 \times 100\ cm. = 900 cm.$

2.02 km = _____ m

Three zeroes larger; move the decimal three places to the right.

$2.02\ \cancel{km}\left(\frac{1000\ \cancel{m}}{1\ \cancel{km}}\right) =$

0.173 km = _____ cm

Five zeroes larger; move the decimal five places to the right.

$0.173\ km\left(\frac{m}{km}\right)\left(\frac{cm}{m}\right) =$

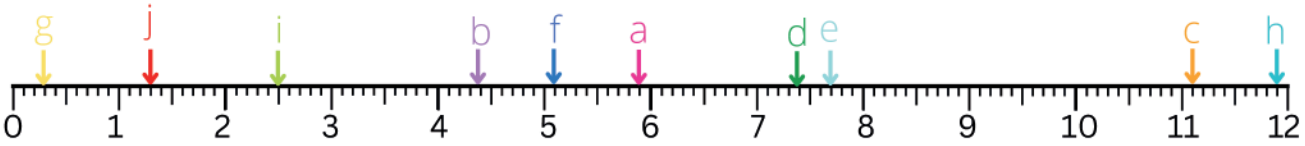
Do you see the pattern?

Multiply by 10 for each box you move to the right; divide by 10 for each box you move to the left. Multiplying by 10 moves the decimal place one digit to the right. Dividing by 10 moves the decimal place one digit to the left.

To which decimal number does each arrow point? (5.34)

a 5.9 c _____ e _____ g _____ i _____

b _____ d _____ f _____ h _____ j _____

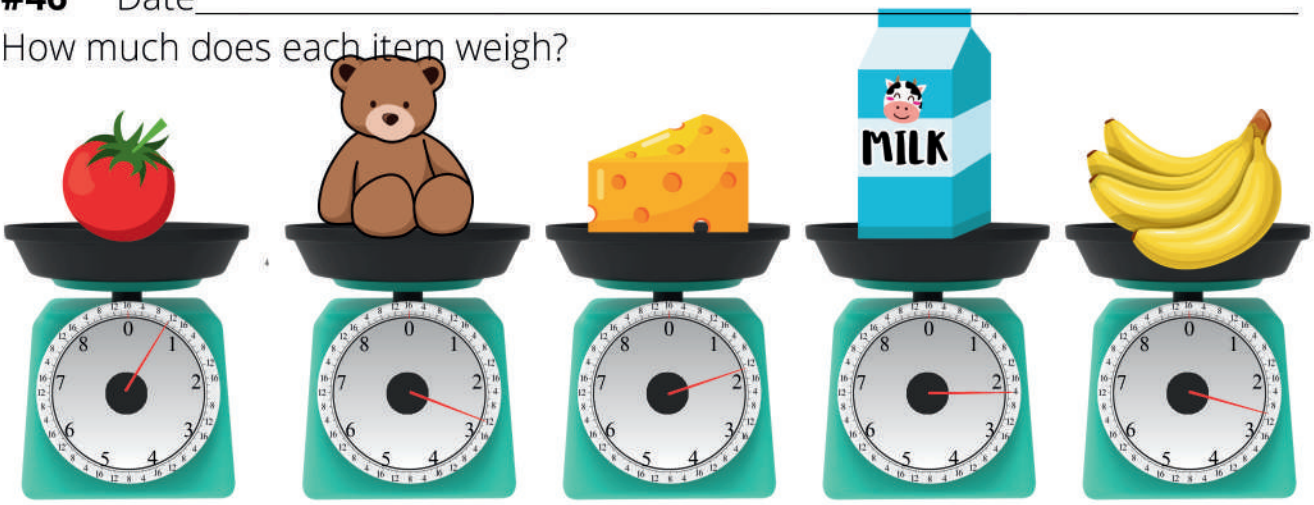


The musical, *Les Miserables*, was a huge hit. The theater was filled all 7 nights. If 14,700 people attended total, how many attended each night?

If each ticket was $30, how much money did the production earn from ticket sales each night?

#46 Date_____

How much does each item weigh?



0 lb 12 oz | ____ lb ____ oz | ____ lb ____ oz | ____ lb ____ oz | ____ lb ____ oz

What is the mass of each item?

2 kg 500 g | ____ kg ____ g | ____ kg ____ g | ____ kg ____ g | ____ kg ____ g

Convert these **US CUSTOMARY** units of weight.

16 oz = 1 lb
2000 lb = 1 ton
1000 g = 1 kg

2 lb = _____ oz

1.5 lb = _____ oz

36 oz = _____ lb ____ oz

1.5 tons = _____ lb

3 tons = _____ lb

5000 lb = _____ ton (decimal)

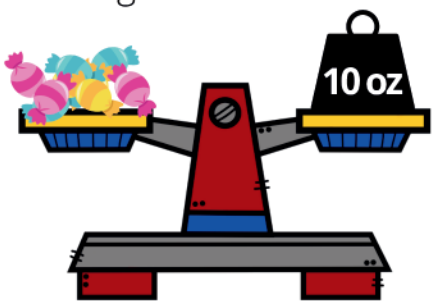
2500 lb = ____ ton _____ lb

3 lb 5 oz = _____ oz

40 oz = _____ lb (decimal)

2 oz = _____ lb (fraction)

Ten pieces of candy are on a scale, balanced by a 10 oz weight. What does each piece of candy weigh?



Convert these **METRIC** units of mass.

kilo	hecta	deca	base unit	deci	centi	milli
1000 g = 1 kg	100 g = 1 hg	10 g = 1 dag	gram	1 g = 10 dg	1 g = 100 cg	1 g = 1000 mg

2 g = _____ mg

2 g = _____ kg

2.5 kg = _____ g

1500 mg = _____ g (decimal)

300 cg = _____ g

3500 g = _____ kg (decimal)

Convert to the BASE UNIT (gram) and then to the desired unit.

0.19 kg = _____ cg Five zeroes larger; move the decimal five places to the right.

$0.19\ \text{kg}\left(\frac{1000\ \text{g}}{1\ \text{kg}}\right)\left(\frac{100\ \text{cg}}{1\ \text{g}}\right) = 0.19 \times 100000 = 19000\ \text{cg}$

1021 mg = _____ kg Six zeroes smaller; move the decimal six places to the left.

$1021\ \text{mg}\left(\frac{1\ \text{g}}{1000\ \text{mg}}\right)\left(\frac{1\ \text{kg}}{1000\ \text{g}}\right) = 1021 \div 1000000 = 0.001021\ \text{kg}$

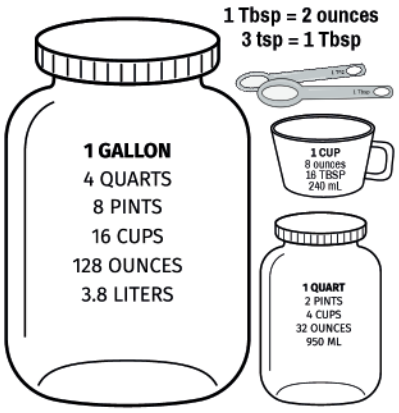
0.25 dag = _____ mg $0.25\ \text{dag}\left(\frac{\text{g}}{\text{dag}}\right)\left(\frac{\text{mg}}{\text{g}}\right) =$

Use comparison symbols (<, >, =) to compare these decimal numbers. (5.34)

0.038 < 3.8	0.53 ◯ 0.35	0.3 ◯ 0.3
1.2 ◯ 0.12	0.44 ◯ 4.4	0.41 ◯ 0.14
0.01 ◯ 0.001	19 ◯ 0.19	0.37 ◯ 0.073

#47 Date_____

Convert these US Customary Units.



2 gal = _____ qt

1 gal = _____ c

16 oz = _____ c

8 pt = _____ gal

1 qt = _____ c

2 Tbsp = _____ oz

2 Tbsp = _____ tsp

10 tsp = _____ Tbsp _____tsp

19 c = _____ gal _____ c

5 c = _____ qt _____ c

36 c = _____ gal ___ qt

160 oz = _____ gal ____qt

12 oz = ____ c ____Tbsp

6 qt = _____ gal _____ c

Convert to the BASE UNIT (liter) and then to the desired unit. (Multiply by one, TWICE, if needed)

kilo	hecta	deca	base unit	deci	centi	milli
1000 L = 1 kL	100 L = 1 hL	10 L = 1 daL	liter	1 L = 10 dL	1 L = 100 cL	1 L = 1000 mL

0.3 L = _____ mL

7000 L = _____ kL

35 daL = _____ L

1.5 kL = _____ L

0.13 kL = 13000 dL

500 cL = _____ hL

0.01 kL = _____ dL

9.7 daL = _____ mL

$0.13\,\text{kL}\left(\frac{1000\,\text{L}}{1\,\text{kL}}\right)\left(\frac{10\,\text{dL}}{1\,\text{L}}\right)=\frac{0.13\times1000\times10}{1}=13000\,\text{dL}$

$500\,\text{cL}\left(\frac{1\,\text{L}}{100\,\text{cL}}\right)\left(\frac{1\,\text{hL}}{100\,\text{L}}\right)=\frac{5}{100\times100}=0.05\,\text{hL}$

$0.01\,\text{kL}\left(\frac{\text{L}}{\text{kL}}\right)\left(\frac{\text{dL}}{\text{L}}\right)=$

$9.7\,\text{daL}\left(\frac{\text{L}}{\text{daL}}\right)\left(\frac{\text{dL}}{\text{L}}\right)=$

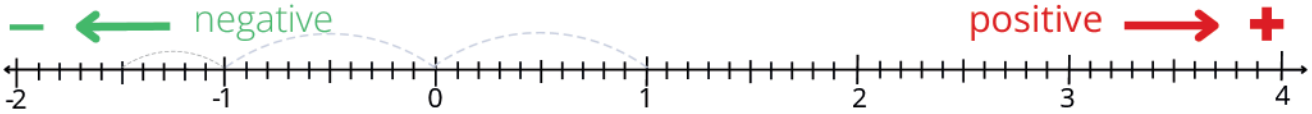
Can each container hold 1 L of liquid or more?

	Yes	No		Yes	No		Yes	No		Yes	No		Yes	No		Yes	No		Yes	No		Yes	No

Circle the best estimate of the volume of each item.

	8L	8oz	8mL		1 qt	1oz	1tsp		1 L	1 gal	1 oz		1 L	1 mL	1 kL		200L	200mL	200kL

Use the number line to find each sum or difference. (3.58)



1 - 2.5 = -1.5 | -1 + 1.1 = ___ | -2 + 1.8 = ___

3 - 2.5 = ___ | 1 + 1.1 = ___ | 2 - 1.8 = ___

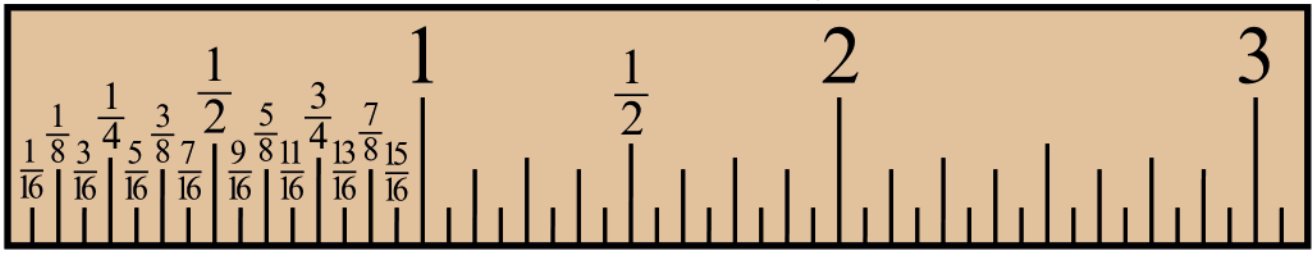
2.5 - 3 = ___ | -1.3 - 0.3 = ___ | -1 - 0.6 = ___

1.5 - 1.7 = ___ | -1.3 + 0.3 = ___ | -1 + 0.6 = ___

Find a common denominator, add the fractions then add the mixed numbers.

$2\frac{1}{4} + 1\frac{3}{8}$ $\quad 1\frac{1}{4} + 2\frac{1}{3}$ $\quad 3\frac{2}{3} + 3\frac{1}{2}$ $\quad 3\frac{3}{4} + 2\frac{1}{2}$ $\quad 1\frac{7}{8} + 2\frac{3}{4}$

Label each vertical line on this ruler. Use the simplest form of each fraction.



Sometimes there is no direct conversion, so you have to use TWO conversion factors to reach the unit you need. Always reduce to the simplest form.

(Multiply by one, TWICE!)

48 in = _____ yd $\quad 48\ \text{in}\left(\frac{1\ \text{ft}}{12\ \text{in}}\right)\left(\frac{1\ \text{yd}}{3\ \text{ft}}\right) = \frac{48}{36}\text{yd.} = 1\frac{1}{3}\ \text{yd.}$

2 yd = _____ in $\quad 2\ \text{yd}\left(\frac{\text{ft}}{\text{yd}}\right)\left(\frac{\text{in}}{\text{ft}}\right) =$

1 mi = _____ yd $\quad 1\ \text{mi}\left(\frac{\text{ft}}{\text{mi}}\right)\left(\frac{\text{yd}}{\text{ft}}\right) =$

#48 Date_____

Solve.

|-6| = 6 |6| = |-35| = |35| =

|2 - 7| = 5 |-2 - 7| = |-7 + 2| = |2 + 7| =

|5 - 22| = 22 - |-5| = 5 - |-22| = |-5 - 22| =

Solve these problems. When the signs are the SAME the result is positive. And when the signs are DIFFERENT, the result is negative.

-6 x 8 = -48 6 x (-8) = 48 ÷(-8) =

3 x (-9) = -3 x (-9) = -27 ÷ 9 =

-8 x (-7) = -8 x 7 = -56 ÷ (-7) =

32 ÷ (-4) = -32 ÷ 4 = -32 ÷ (-4) =

Write an integer to represent each expression:

You dove fifteen feet below the ocean's surface. -15

You earned $2300. _____

It is 20 degrees below zero. _____

Move 15 units to the left of 3 on the number line. _____

You made a profit of $2500 on an investment. _____

She received a five point deduction on figure skating. _____

Today is 17 degrees colder than yesterdays 5 degree temperature. _____

What do you call acetominophen all by itself?

Use the number line and the clues to find the answer.

Plot these points on the number line:

A point at 3. Label it T

Two points that are 9 away from 3. Label both points E.

Two points that are 3 away from 3. Label both points Y.

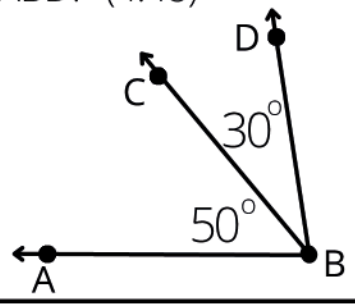
Two points that are 15 away from 3. Label both points O.

Two points that are 12 away from 3. Label both points N.

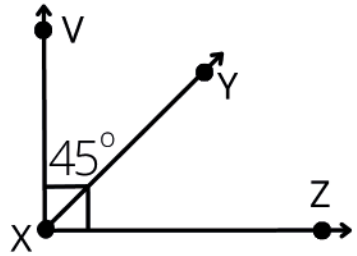
Two points that are 18 away from 3. Label both points L.

Two points that are 6 away from 3. Label both points L.

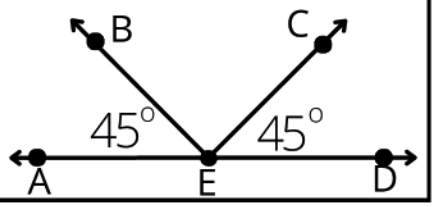
What is the measure of <ABD? (4.48)



What is the measure of <YXZ?



AD is a straight line. What is the measure of <BEC?



Find a common denominator, then add and subtract the fractions. (5.27)

$\frac{1}{2} - \frac{1}{4} =$ $\frac{2}{4}$ $\frac{1}{4}$

$\frac{5}{6} - \frac{3}{12} =$

$\frac{1}{3} + \frac{1}{4} =$

$\frac{7}{8} - \frac{1}{2} =$

$\frac{1}{2} + \frac{1}{3} =$

$\frac{2}{2} - \frac{1}{3} =$

$\frac{1}{3} - \frac{1}{12} =$

$\frac{1}{4} + \frac{5}{8} =$

$\frac{2}{3} - \frac{3}{6} =$

$\frac{3}{4} - \frac{3}{6} =$

$\frac{1}{2} + \frac{3}{6} =$

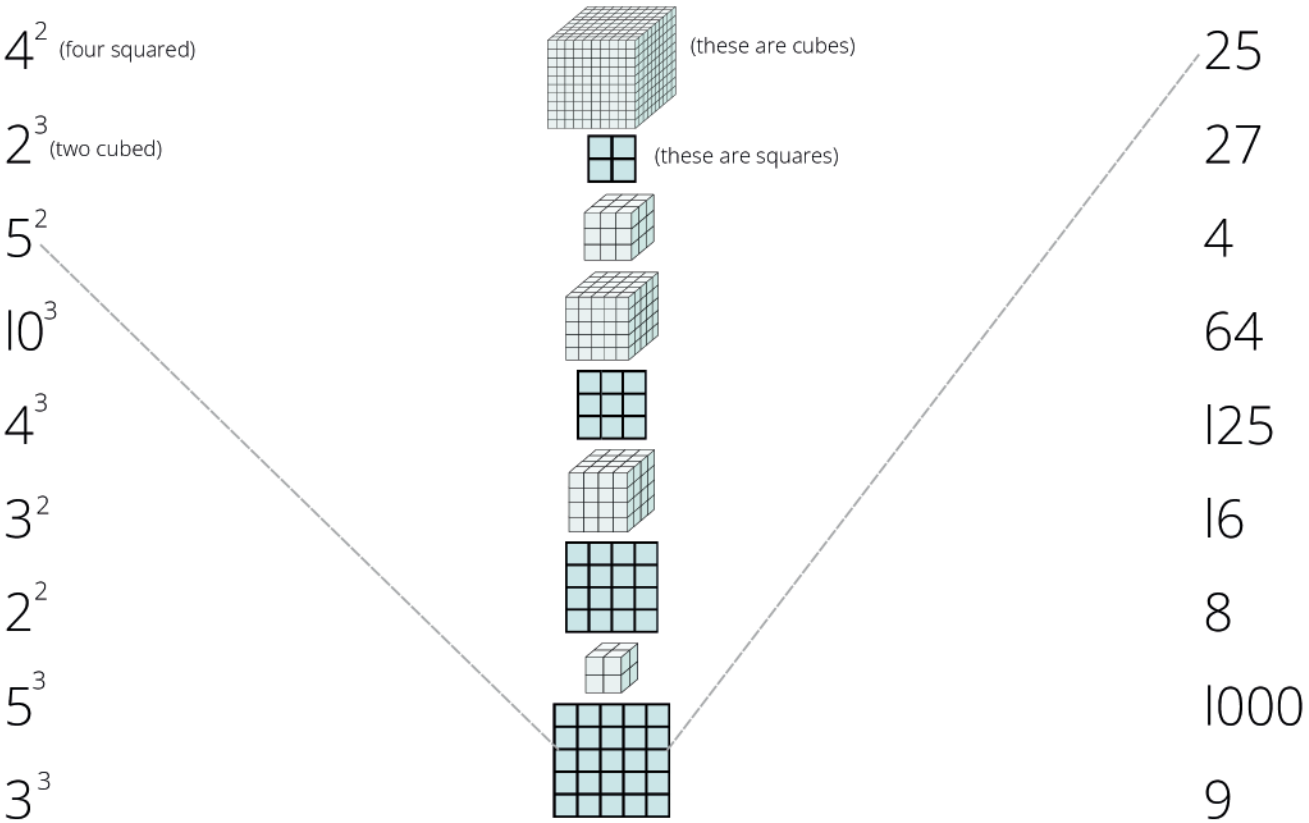
$\frac{3}{4} - \frac{3}{12} =$

#49 Date_____

Find the value of the exponents.

Two to the power of zero	2^0= ____	3^0= ____
Two to the power of one	2^1= ____	3^1= ____
Two squared	2^2= 2 x 2 = ____	3^2= 3 x 3 = ____
Two cubed	2^3= 2 x 2 x 2 = ____	3^3= 3 x 3 x 3 = ____
Two to the power of four	2^4= 2 x 2 x 2 x 2= ____	3^4= 3 x 3 x 3 x 3= _____
Two to the power of five	2^5= 2 x 2 x 2 x 2 x 2 = ____	3^5= 3 x 3 x 3 x 3 x 3 = _____

Draw lines to connect each column.



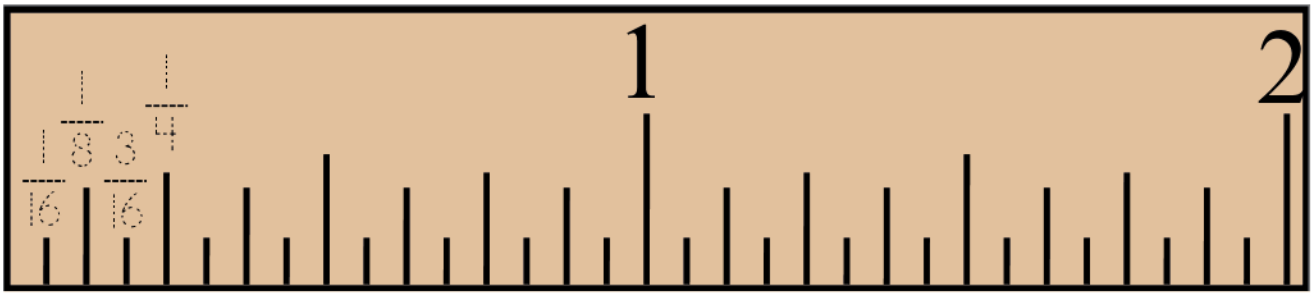
Find both square roots.

$\sqrt{25}$ =___	$\sqrt{9}$ =___	$\sqrt{36}$ =___	$\sqrt{16}$ =___	$\sqrt{4}$ =___
$\sqrt{1}$ =___	$\sqrt{100}$ =___	$\sqrt{64}$ =___	$\sqrt{81}$ =___	$\sqrt{49}$ =___

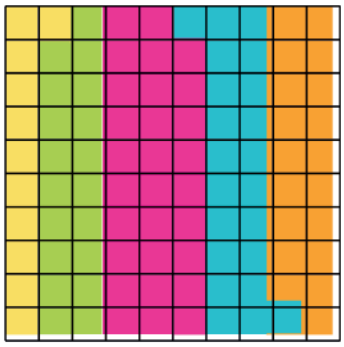
Solve.

$\lvert -3 - 12 \rvert =$ 15	$\lvert 6 - 9 \rvert =$	$\lvert -4 - 6 \rvert =$
$5 \times \lvert -8 \rvert =$ 40	$5 \times (-8) =$	$3 + \lvert -15 \rvert =$
$\lvert -7 \rvert \times 6 =$	$-7 \times 6 =$	$\lvert -56 \rvert \div 8 =$
$7 \times (-8) =$	$-7 \times 8 =$	$-7 \times (-8) =$

Label each vertical line on this ruler. Use the simplest form of each fraction.



This grid has 100 squares. What percentage is each color? (4.40)

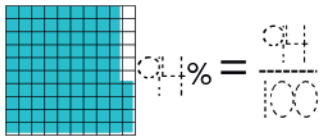


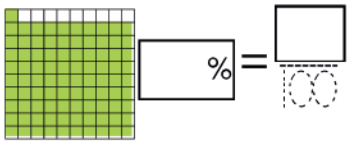
percent	fraction	decimal	percent	fraction	decimal
11 %	11/100	0.11			

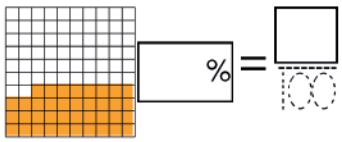
Add all of the percentages.

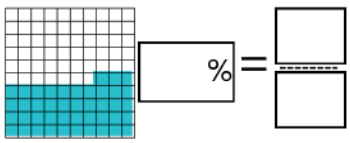
11 + + + + =

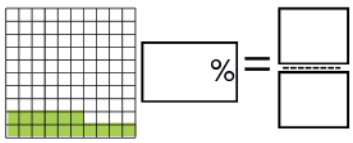
Each block has 100 squares. Color the squares to illustrate each percentage equation and fill in any missing parts of each equation. (4.40)

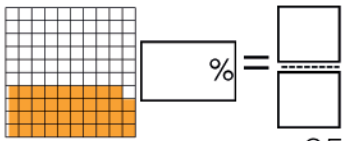












#50 Date_____

Solve using the Order of Operations (PEMDAS).

$5^2 - \sqrt{81} =$ _____

$9 - 12 \div 4 =$ _____

$2(5 + 1) \div (-2) =$ _____

$2 + 3 \times 4 - 7 \times 2 =$ _____

$8(6 \times 2) \div \sqrt{36} =$ _____

$1 + 24 \div 2^2 =$ _____

$|3 - 2 \times 5| =$ _____

$\sqrt{100} - 7(2 \times 4) =$ _____

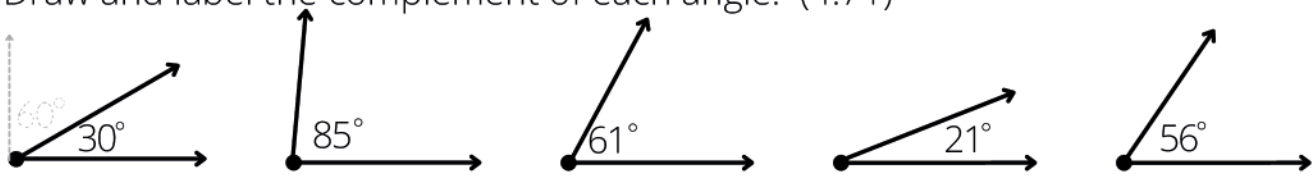
$-8(5 + 1) \div 12 =$ _____

$(2 + 14 \div 2) \div 3 =$ _____

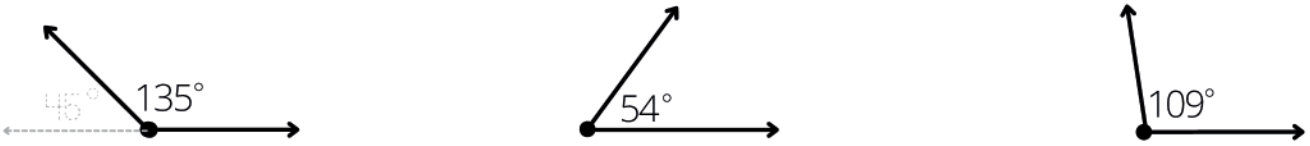
$(8^2 - 6^2) \div 7 =$ _____

$-7 + 6 \times (-2) =$ _____

Draw and label the complement of each angle. (4.71)



Draw and label the supplement of each angle.



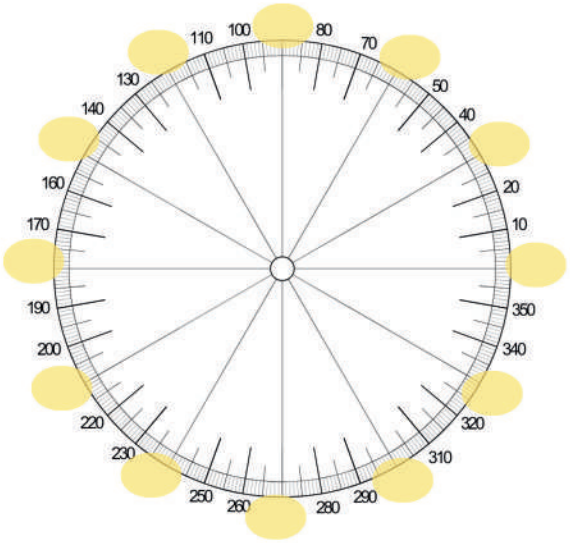
Write operators (x, ÷, +, -) in all of the empty squares to make each number sentence true. Remember to apply the Order of Operations, PEMDAS. (3.83)

8	÷	2	+	1	=	5
1		3		2	=	1
7		6		9	=	4
=		=		=		=
1		1		8	=	8

2	-	2	x	1	=	0
5		0		3	=	3
6		3		7	=	-5
=		=		=		=
1		2		-4	=	-2

5	-	1	+	3	=	7
3		4		6	=	2
2		2		4	=	0
=		=		=		=
4		2		1	=	9

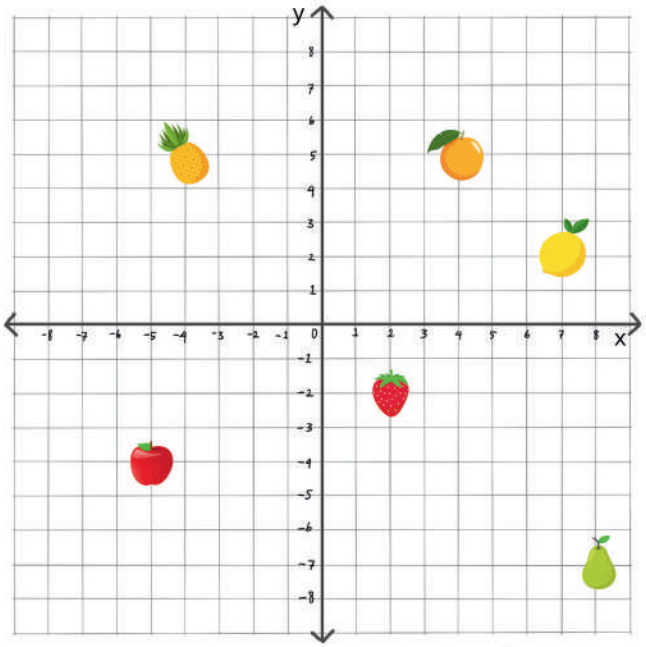
Use your reference pages to fill in the missing angles (the yellow ovals). (4.48)

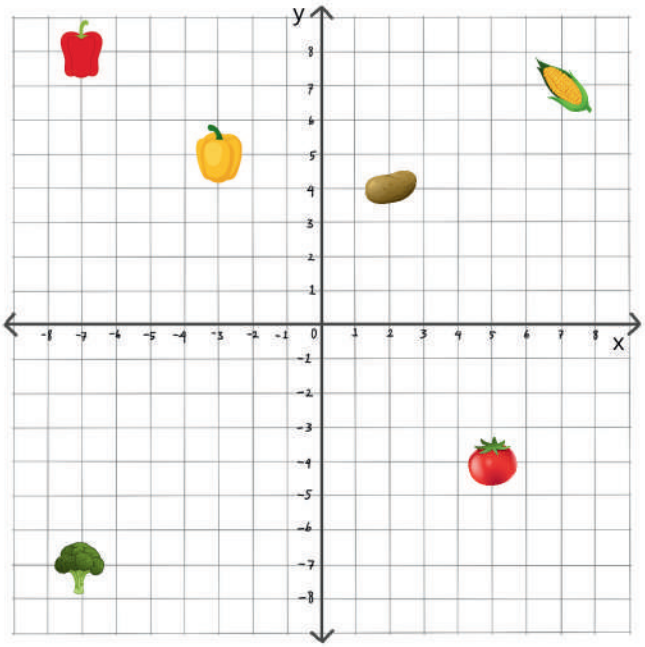


Draw:

Right Angle	Line Segment
Reflex Angle	Ray
Obtuse Angle	Line
Straight Angle	Acute Angle

Find the coordinates (x, y) of each item. (4.80)





(4, 5)(,)(,)(,)(,)(,)

(-7, 8)(,)(,)(,)(,)(,)

What are the coordinates of the origin?

#52 Date_____

Complete this chart. Write fractions in their simplest form. Round decimals to the **hundredths place** and percents to the **whole number**.

Is the denominator a factor of 10 or 100?

Yes use the butterfly method No divide the numerator by the denominator

1x100=100 4x?=100

$\frac{1}{4} = \frac{\square}{100}$

1x10=10 5x?=10

$\frac{1}{2} = \frac{\square}{10}$

3x100=300 4x?=300

$\frac{3}{4} = \frac{\square}{100}$

round to the hundredths place.

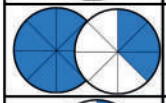
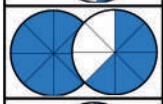
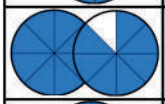
5 or more let the circled digit soar, 4 or less let the circled digit rest

$8\overline{)1.000}$

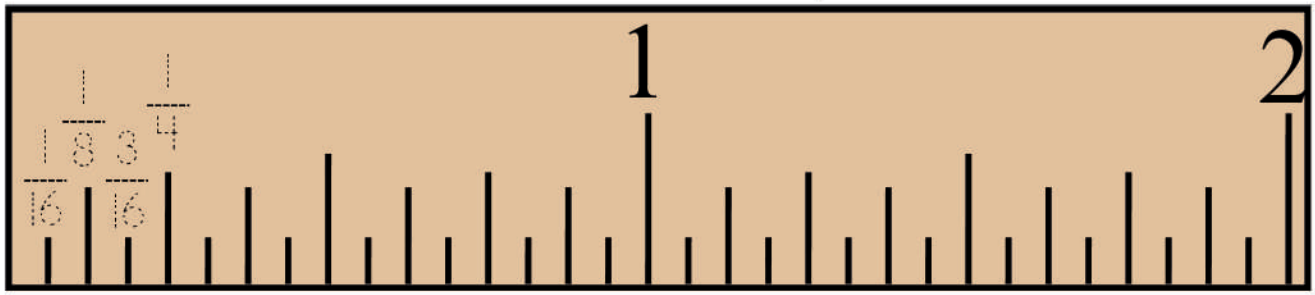
$8\overline{)3.000}$

$8\overline{)5.000}$

$8\overline{)7.000}$

Visual Fraction	Numerical Fraction	Decimal	Percent
	$\frac{1}{8}$	0.13	13%
			
			
			
			
			
			
			

Label each vertical line on this ruler. Use the simplest form of each fraction.



Find a common denominator, then add and subtract the fractions. Simplify. (5.27)

$\frac{3}{4} - \frac{1}{2} = \frac{1}{4}$ (12, 24)

$\frac{1}{4} + \frac{7}{12} =$

$\frac{2}{3} - \frac{1}{2} =$

$\frac{3}{8} + \frac{1}{4} =$

$\frac{1}{2} - \frac{1}{3} =$

$\frac{2}{3} + \frac{1}{2} =$

$\frac{1}{3} - \frac{1}{12} =$

$\frac{1}{3} + \frac{4}{9} =$

How many years is seventy-five percent of two centuries?

If 10 notebooks cost $18.90, how many of them could you buy with $100?

List eight **multiples** of:

2: 2, 4, 6, 8, 10, 12, 14, 16

3: ___, ___, ___, ___, ___, ___, ___, ___

4: ___, ___, ___, ___, ___, ___, ___, ___

5: ___, ___, ___, ___, ___, ___, ___, ___

6: ___, ___, ___, ___, ___, ___, ___, ___

7: ___, ___, ___, ___, ___, ___, ___, ___

8: ___, ___, ___, ___, ___, ___, ___, ___

9: ___, ___, ___, ___, ___, ___, ___, ___

Name the least common multiple (LCM) of:

2 and 3 6 | 2 and 4 ____

2 and 5 ____ | 3 and 4 ____

3 and 5 ____ | 3 and 6 ____

3 and 9 ____ | 4 and 8 ____

5 and 6 ____ | 5 and 7 ____

5 and 8 ____ | 5 and 9 ____

6 and 8 ____ | 6 and 9 ____

7 and 6 ____ | 7 and 8 ____

Find a common denominator (LCM) for both fractions before adding or subtracting them. Simplify.

$\frac{1}{2} + \frac{1}{3} = \frac{3}{6} + \frac{2}{6} = \frac{5}{6}$ $\quad \frac{1}{2} - \frac{1}{4} =$ $\quad \frac{1}{2} + \frac{1}{5} =$ $\quad \frac{2}{3} - \frac{1}{4} =$

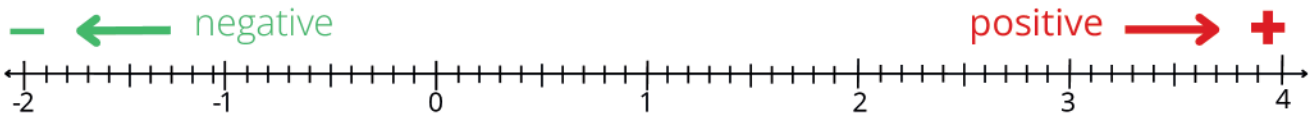
$\frac{2}{3} + \frac{3}{5} =$ $\quad \frac{1}{3} - \frac{1}{6} =$ $\quad \frac{1}{3} + \frac{2}{9} =$ $\quad \frac{3}{4} - \frac{1}{8} =$

$\frac{4}{5} + \frac{5}{6} =$ $\quad \frac{4}{5} - \frac{3}{7} =$ $\quad \frac{1}{5} + \frac{3}{8} =$ $\quad \frac{4}{5} - \frac{4}{9} =$

$\frac{4}{7} + \frac{1}{6} =$ $\quad \frac{5}{7} - \frac{1}{8} =$ $\quad \frac{2}{7} + \frac{4}{9} =$ $\quad \frac{5}{8} - \frac{1}{9} =$

#53 Date_____

Use the number line to find each sum or difference.

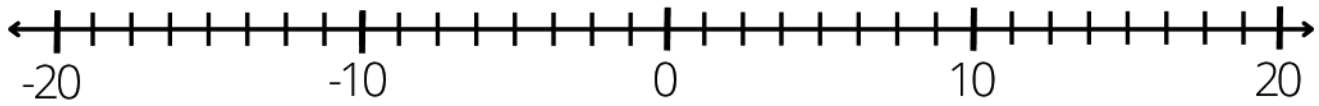


1 - 1.5 = -0.5 | 1 + 2.1 = ____ | -2 + 1.3 = ____

2 - 3.7 = ____ | 1 - 2.1 = ____ | -0.2 + 3.8 = ____

2.4 - 3 = ____ | -2 + 1.9 = ____ | 3 - 0.4 = ____

1.6 - 1.5 = ____ | 4 - 1.1 = ____ | 3 + 0.4 = ____



Stack the decimal numbers and follow the algorithm to add and subtract them. Always subtract the smaller number from the larger number, then change the sign if you need to.

3.009 - 7.4 = -4.391

$$\begin{array}{r} 7.400 \\ -3.009 \\ \hline 4.391 \end{array}$$

2 - 8.015 = _____

12 - 15.35 = _____

-1 - 6.12 = _____

-9.5 + 3.07 = _____

4.2 - 14.2 = _____

11.5 + 5.68 = _____

3.9 - 12.05 = _____

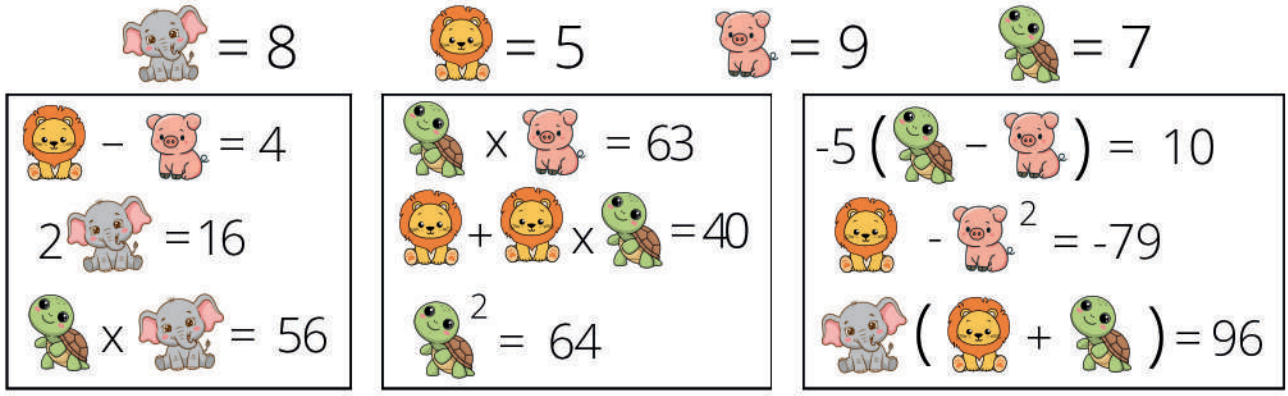
Use comparison symbols (<, >, =) to compare these decimal numbers. (5.34)

1.121 < 1.211 | 0.09 ___ 0.90 | 0.50 ___ 0.5

2.132 ___ 21.32 | 0.41 ___ 0.14 | 0.28 ___ 2.8

0.510 ___ 0.51 | 3.09 ___ 30.9 | 1.37 ___ 13.7

Each group contains two truths and a lie. Circle the LIE in each group. Follow the order of operations (PEMDAS). (3.38)



Complete this chart. Write fractions in their simplest form. Round decimals to the **hundredths place** and percents to the **whole number**. (5.33)

Is the denominator a factor of 10 or 100?

Yes use the butterfly method

1x10=10 5x?=10

$\frac{1}{2} = \frac{}{10}$

1x100=100 4x?=100

$\frac{1}{4} = \frac{}{100}$

1x10=10 5x?=10

$\frac{1}{5} = \frac{}{10}$

No divide the numerator by the denominator

round to the hundredths place.

4 or more let the circled digit rest

3)1.000

6)1.000 7)1.000 8)1.000 9)1.000

Visual Fraction	Numerical Fraction	Decimal	Percent
	$\frac{1}{2}$	0.5	50%

#54 Date_____

Find the products. Does it match your estimate?

3.95×2.5 almost 4 times 2 1/2

1975
7900
9875

three digits behind decimals

2.104×1.78 2 times almost 2

45.06×10.2 about 45 times 10

5.199×4.7 a little more than 5 times a little less than 5

6.049×0.68

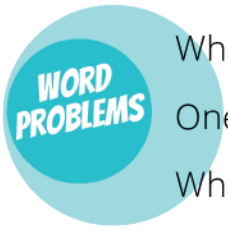
2.015×0.79

5.42×3.25

31.18×9.03

6.875×5.9

45.01×1.98



quantity means parentheses

What is eight times the quantity of three and four? $8(3 + 4) =$

One quarter is what fraction of a dollar? What decimal? What percent?

What is seven eighths of forty-eight?

Order the numbers from smallest to largest.

15.2	12.5	1.25	1.52
_____ smallest	_____	_____	_____ largest
2.41	4.12	1.42	1.24
_____ smallest	_____	_____	_____ largest
35.06	56.03	36.05	56.3
_____ smallest	_____	_____	_____ largest

Compare these numbers (<, >, =)

13.15	13.51
6.022	6.202
24.812	24.813
88.08	8.808
7.199	7.119
5.215	52.15

Solve these problems. (5.48)

$|-3 - 7| =$ 10 $\quad |1 - 11| =$ $\quad |5 - 6| =$

$9 \times |-8| =$ $\quad |9 \times (-8)| =$ $\quad -9 \times |-8| =$

$(-7)^2 =$ $\quad -(7^2) =$ $\quad |-42| \div 7 =$

$7 \times (-5) =$ $\quad -5 \times 7 =$ $\quad -42 \div 7 =$

Compare these values using these operators (<, >, =).

$|-11|$ < $|-13|$ $\quad |-45|$ $\quad |46|$

-15 $\quad -|-15|$ $\quad 19$ $\quad |-29|$

$|32|$ $\quad |-33|$ $\quad -|28|$ $\quad |-28|$

Divide and shade circles to show that $3\frac{3}{4}$ equals $\frac{15}{4}$.

add

$3\frac{3}{4}$ $4 \times 3 = 12$ $12 + 3 = 15$ $\frac{15}{4}$

multiply

Find the squares. (5.49)

$2^2 =$ 4 $\quad 6^2 =$ $\quad$

$3^2 =$ $\quad 7^2 =$ $\quad$

$4^2 =$ $\quad 8^2 =$ $\quad$

$5^2 =$ $\quad 9^2 =$ $\quad$

Find both square roots.

$\sqrt{16} =$ 4, -4 $\quad \sqrt{25} =$ $\quad$

$\sqrt{81} =$ $\quad \sqrt{1} =$ $\quad$

$\sqrt{36} =$ $\quad \sqrt{4} =$ $\quad$

$\sqrt{64} =$ $\quad \sqrt{49} =$ $\quad$

#55 Date_____

When the divisor is a decimal, multiply both the dividend and the divisor by ONE (10/10 or 100/100) until the divisor is a whole number.

$4.2 \div 0.6 = 7$

$4.2 \times \frac{10}{10} = 42$ $0.6 \times \frac{10}{10} = 6$

$42 \div 6 = 7$

$6.4 \div 0.8 =$

$0.48 \div 0.6 =$

$7.2 \div 0.09 =$

$0.63 \div 0.07 =$

$0.49 \div 0.7 =$

$5.6 \div 0.8 =$

$0.9\overline{)4.5}$ 5

45/9=5

$0.6\overline{)5.4}$

$0.3\overline{)2.1}$

$1.1\overline{)6.6}$

$0.5\overline{)4.5}$

$1.3\overline{)5.2}$

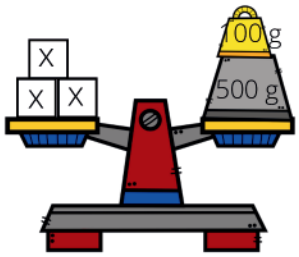
$0.12\overline{)0.48}$ 4

48/12=4

$0.08\overline{)0.96}$

$0.07\overline{)8.40}$

Three identical blocks are on a balanced scale with a 100 gram weight and a 500 gram weight on the other side. What does each block weigh?



What time is 43 minutes before midnight?

17 of the 20 questions on your test were correct. What percent is that?

Five sixths of the dozen cartons of yogurt are strawberry. How many cartons of strawberry yogurt are there?

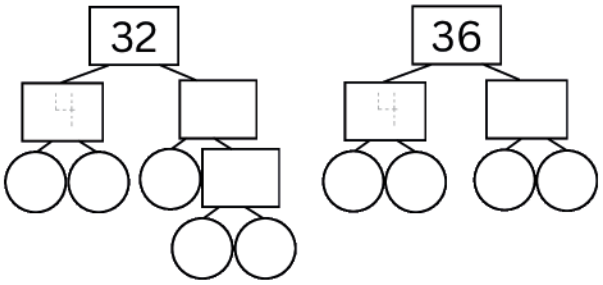
12 of the 25 kids in the play are boys. What fraction of the kids in the play are NOT boys? What is that decimal and percent?

List the **factors** of 32: ____, ____, ____, ____, ____, ____

List the **factors** of 36: ___, ___, ___, ___, ____, ____, ____, ____, ____

What is the Greatest Common Factor (GCF) of 32 and 36? _____

Factor the number in the top box of each factor tree. (5.24)



prime factorization: _____

prime factorization: _____

Reduce this fraction to its simplest form two different ways.

$\frac{32}{36}$ $\frac{32 \div \text{GCF}}{36 \div \text{GCF}} =$

Cancel common factors from the numerator and denominators.

$\frac{\text{prime factorization of 32}}{\text{prime factorization of 36}} =$

List the **factors** of:

10: 1, 2, 5, 10

12: ___, ___, ___, ___, ___, ___

15: ___, ___, ___, ___

18: ___, ___, ___, ___, ___, ____

20: ___, ___, ___, ___, ___, ____

24: ___, ___, ___, ___, ___, ___, ___, ___

Name the greatest common factor (GCF) of:

10 and 12 2 | 10 and 15 ____

10 and 20 ____ | 12 and 15 ____

12 and 18 ____ | 12 and 20 ____

15 and 18 ____ | 15 and 24 ____

18 and 24 ____ | 20 and 24 ____

Simplify these fractions. Divide numerator and denominator by their GCF.(5.26)

$\frac{10}{12} \frac{/2}{/2} = \frac{5}{6}$ $\frac{10}{15} =$ $\frac{10}{20} =$ $\frac{12}{15} =$ $\frac{12}{18} =$

$\frac{12}{20} =$ $\frac{15}{18} =$ $\frac{15}{24} =$ $\frac{18}{24} =$ $\frac{20}{24} =$

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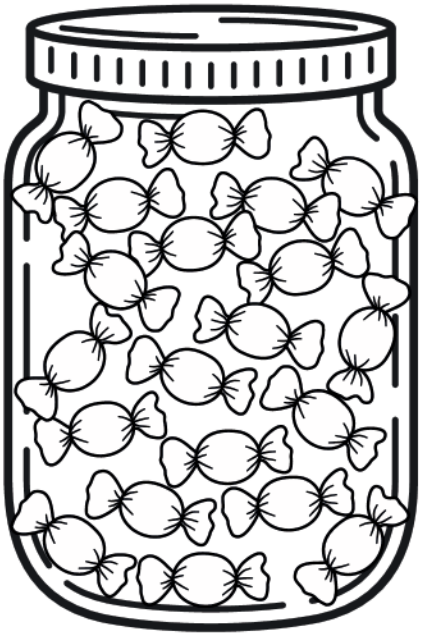


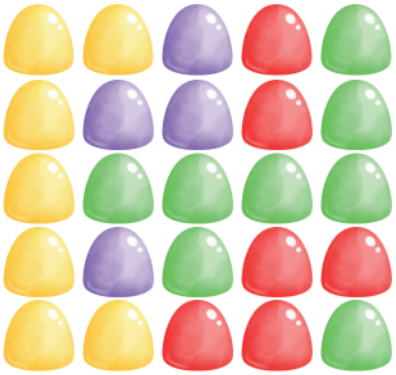
Color the candies in this jar so that:

- 35% of the candies are red
- 30% of the candies are blue
- 20% of the candies are yellow
- 15% of the candies are green

What **fraction** of the candies are:

red _____ blue _____

yellow _____ green _____



	fraction	rename fraction	percent
red	5/25	20/100	20%
purple			
green			
yellow			

What is the ratio of red gumdrops to green gumdrops?

There are 50 beads on the bracelet. 46% of them are yellow. How many are yellow?

24% of the beads are pink. How many are pink?

The rest of the beads are green. What percentage are green?

What fraction (simplest form) of the bracelet is each color:

yellow $\frac{23}{50}$ pink green

Find the products. (5.54)

15.015 x 12.3

45045
300300
1501500
184.6845

four digits behind decimals

9.112 x 14.6

24.32 x 15.7

11.04 x 1.97

34.45 x 8.54

21.35 x 6.49

18.09 x 3.9

14.18 x 5.13

32.75 x 9.01

15.99 x 2.57

Use the menu prices to add up the cost of each meal. Find each customer's change if they pay with a $10.00 bill. Line up the decimals! (4.39)

BAKERY TRUCK

Cupcake	$3.49
Brownie	$2.59
Cookie	$2.47
Sweet Roll	$3.95
Fruit tart	$4.98
Soda	$3.49
Smoothie	$3.97
Coffee	$2.54

3.49
+ 4.98

10.00

Soda
fruit tart

Smoothie
brownie
cookie

Coffee
Sweet roll

#57 Date_____

Calculate multiples of 1%:

1% of 60 = 0.6

1% of 100 =

3% of 100 =

5% of 80 =

5 times one percent

0.8
x 5
4.0

4% of 60 =

0.6
x 4

2% of 60 =

Calculate multiples of 10%:

10% of 60 = 6

twice ten percent

10% of 30 =

10% of 80 =

20% of 60 =

5 times ten percent or half of 60

30% of 30 =

50% of 80 =

50% of 60 =

40% of 30 =

90% of 80 =

Break each percent into friendly numbers:

10% of 40 = 5

half of ten percent

10% of 100 =

10% of 90 =

5% of 40 =

10% + 5%

5% of 100 =

5% of 90 =

15% of 40 =

10% + 10% + 5% OR 40/4

15% of 100 =

15% of 90 =

25% of 40 =

25% times 3

25% of 100 =

25% of 90 =

75% of 40 =

75% of 100 =

75% of 90 =

Break each percent into friendly numbers:

18% = 10% + 5 % + 1% + 1% + 1%

18% of 40 =

25% of 36 =

90% = 100% - 10%

90% of 70 =

4% of 50 =

50% of 48 =

11% of 200 =

30% of 70 =

16% of 50 =

27% of 50 =

99% = 100% - 1%

5% of 20 =

99% of 200 =

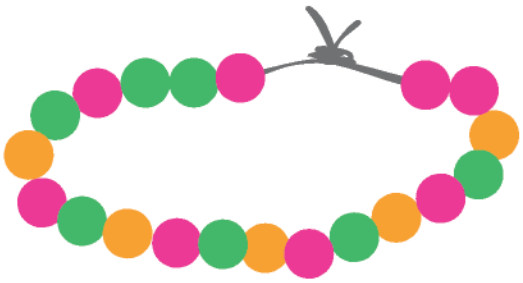
8% of 200 =

95% of 140 =

72% of 175 =

22% of 150 =

	fraction	rename fraction	percent
pink			
green			
orange			



What is the ratio of green beads to orange beads?

You earned 80% on a test with 50 questions. How many questions did you answer correctly?

What time is 35 minutes before midnight?

Three fifths of the 100 passengers on the plane chose a chicken meal. The rest of them chose beef. How many of them chose beef?

Write fractions equal to ½ and ¾ and subtract the smaller fraction from the larger fraction.

Solve. When multiplying, if the signs are the SAME the result is positive, and when the signs are DIFFERENT, the result is negative. Remember PEMDAS.

$-7 \times 8 =$ -56

absolute value

$|2 - 17| =$

$18 \div (-3) =$

absolute value

$3 \times |-9| =$ 27

$1 + (-3 \times 7) =$

$-10 + |-3 \times 4| =$

$-6(2 \times 4) =$

$6^2 + (-9) \times 4 =$

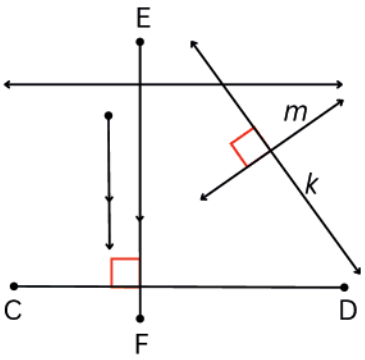
$|-56 \div 7| + (-8) =$

$-72 \div |-9| =$

$(-5 + 3) \div -1 =$

$|5^2 - 6^2| =$

#58 Date_____



1. Trace the horizontal line orange.
2. Which line segment is parallel to the ray? _____
3. Name the two perpendicular line segments:
   _____ and _____
4. Trace one oblique line red and one green.
5. Name the two perpendicular lines:
   _____ and _____

What angle do clock hands pointing to 9:00 make?

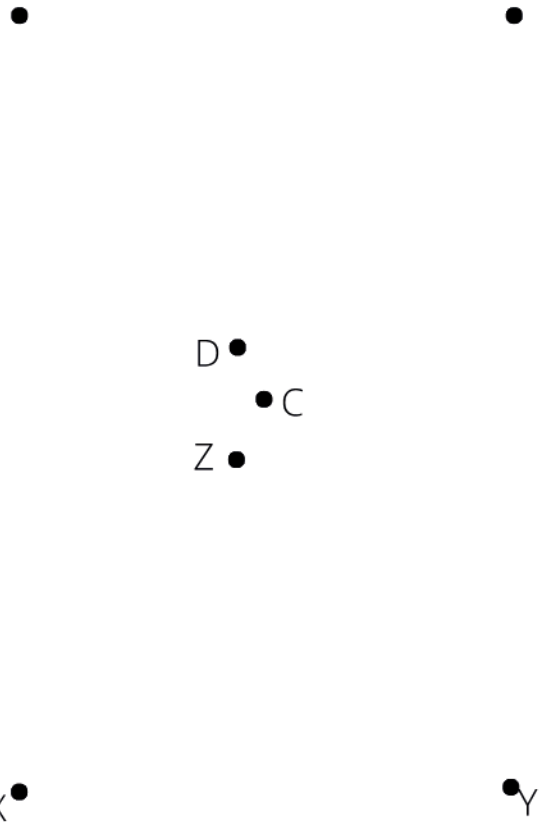
Draw two parallel line segments.

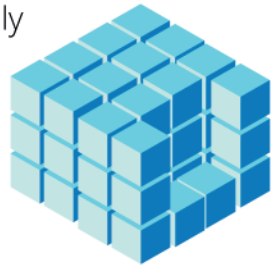
Draw a pair of intersecting lines that are perpendicular.

Draw four line segments the same length at right angles to each other. What shape did you draw?

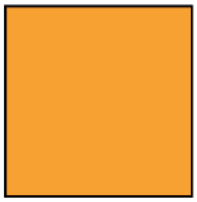
What word begins with E and ends with E, but only has one letter?

- Start at point X.
- Draw a line segment $\overline{XY}$.
- From point Y, draw a 5" vertical line perpendicular to $\overline{XY}$.
- Label that point A.
- Draw a line segment parallel to and the same length as $\overline{XY}$ from point A directly west.
- Label that point B.
- Draw line segment $\overline{BC}$.
- Draw line segment $\overline{CX}$.
- Draw line segment $\overline{XB}$.
- Draw an oblique line segment from point D to point A.
- Draw another oblique line segment from point Z to point Y.



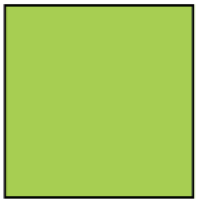
If the perimeter of a square is 5 feet, how many inches long is each side?	This pallet of boxes is stacked in a warehouse. Boxes are only removed from the top. How many boxes are left on the pallet? 
How many seconds are in 1 hour?	You made 5 dozen cookies. How many cookies is that? You want to keep one dozen cookies and share the rest equally among your six best friends. How many cookies will you give each friend? 

Draw a HORIZONTAL line and a VERTICAL line to divide this square into FOURTHS.



Use two OBLIQUE lines to divide this square into FOURTHS.

Draw 3 HORIZONTAL lines to divide this square into FOURTHS.



Draw 3 VERTICAL lines to divide this square into FOURTHS.

Solve. When multiplying, if the signs are the SAME the result is positive. And when the signs are DIFFERENT, the result is negative. Remember PEMDAS.

$|-6 \times 8| =$ 48

$5^2 - 2(3x4) =$

$-24 \div 6 =$

$-8 \times (3 + 4) =$

$-8 \times 3 + 4 =$

$|-8| \times 3 + 4 =$

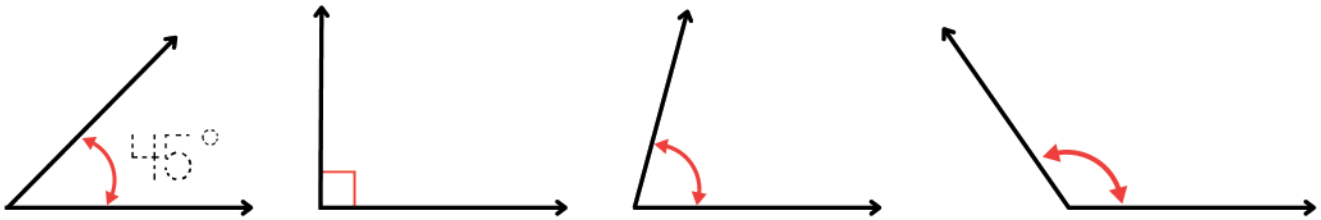
$-|12 - 3 \times 5| =$

$(-9)^2 - 7^2 =$

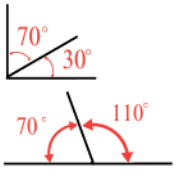
$-3 + (-9) =$

#59 Date_____

Use your protractor to measure each angle. Use units (degree).



COMPLEMENTARY angles add up to 90 degrees.
SUPPLEMENTARY angles add up to 180 degrees.



complementary angles

supplementary angles

Draw:

Right Angle (include the small square)

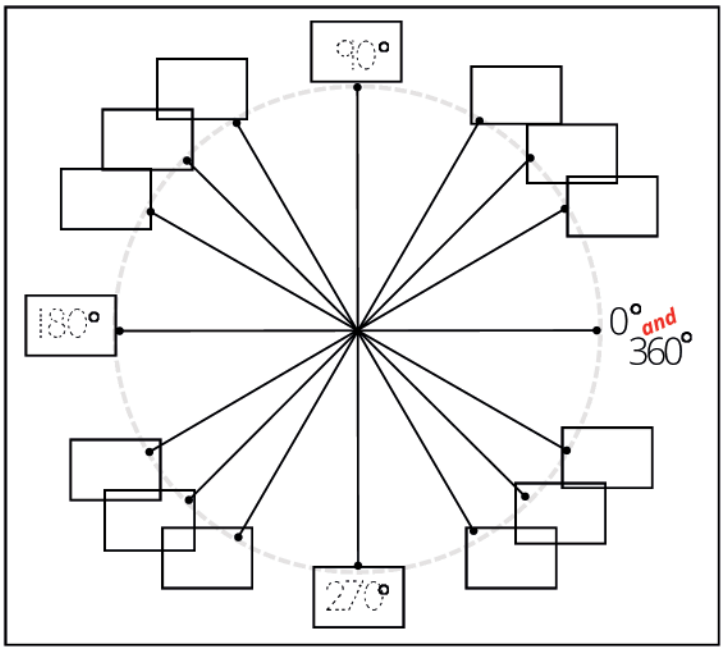
Acute Angle

Straight Angle

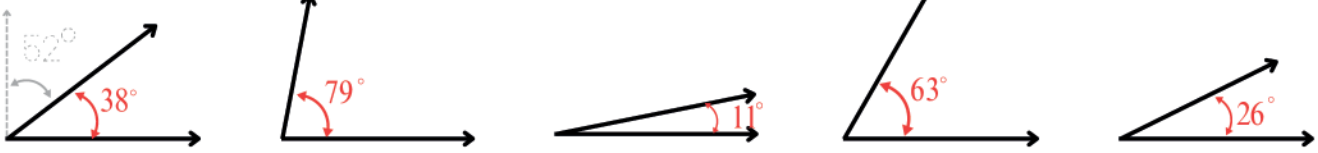
Obtuse Angle

Reflex Angle

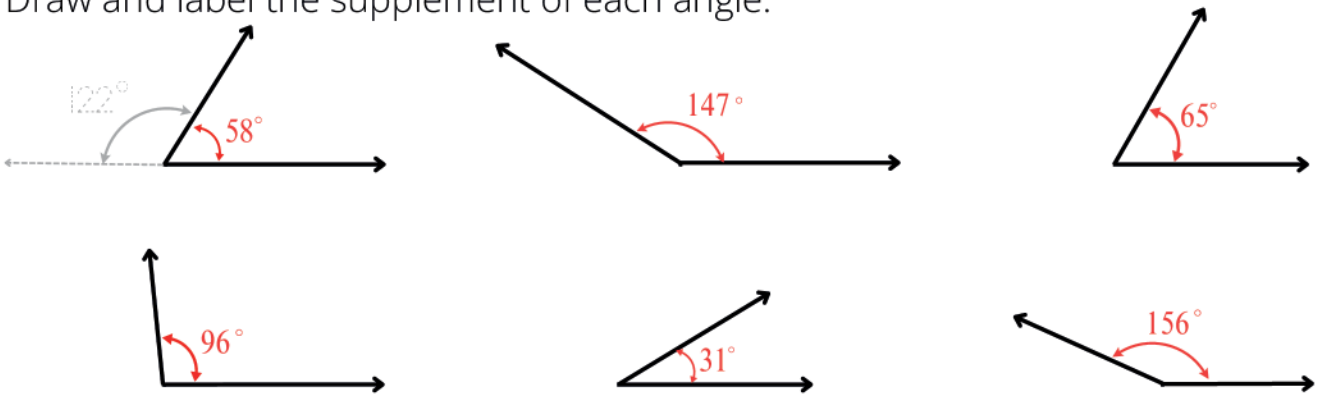
Fill in the boxes around this circle with the correct angle measurements. Use your reference pages if you need to.



Draw and label the complement of each angle.



Draw and label the supplement of each angle.



Complete this chart. Round decimals to the hundredths place and just use whole number percents. (5.33)

Is the denominator a factor of 10 or 100?

Yes use the butterfly method

No divide the numerator by the denominator

round to the hundredths place

5 or more let the circled digit soar, 4 or less let the circled digit rest

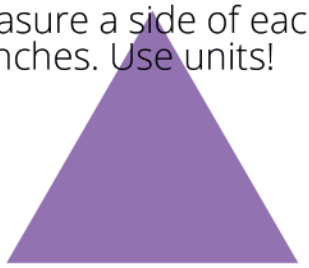
$9\overline{)1.000}$ $9\overline{)2.000}$ $9\overline{)3.000}$

$9\overline{)5.000}$ $9\overline{)7.000}$ $9\overline{)8.000}$

Visual Fraction	Numerical Fraction	Decimal	Percent
	$\frac{1}{9}$	0.11	11%

#60 Date_____

Measure a side of each REGULAR polygon with a ruler to find each side length in inches. Use units!

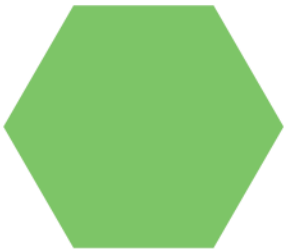


name: triangle
number of sides: 3
side length: 1.5 in.
perimeter: 4.5 in.

two names

name: square, quadrilateral
number of sides: _____
side length: _____
perimeter: _____

name: _____
number of sides: _____
side length: _____
perimeter: _____



name: _____
number of sides: _____
side length: _____
perimeter: _____

name: _____
number of sides: _____
side length: _____
perimeter: _____

name: _____
number of sides: _____
side length: _____
perimeter: _____

Write each **quadrilateral** term twice.

trapezoid

square

parallelogram

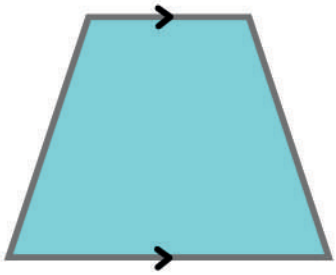
rectangle

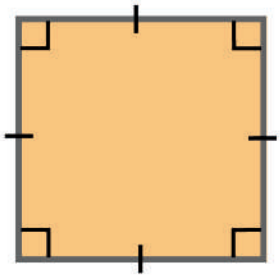
rhombus

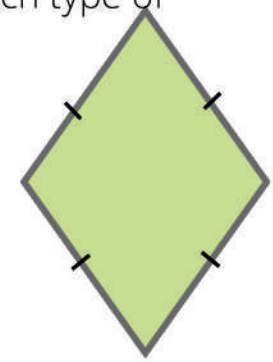
Match each term to its properties.

- Has two pairs of parallel sides, right angles and congruent sides.
- Has two pairs parallel sides, and four right angles.
- Has only one pair of parallel sides.
- A parallelogram with four congruent sides, but it does not have to have 4 right angles.
- Has 2 pairs of parallel sides, opposite each other.

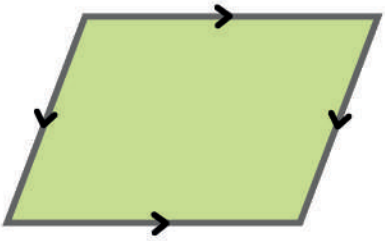
Use the flow chart from your reference pages to identify each type of quadrilateral.

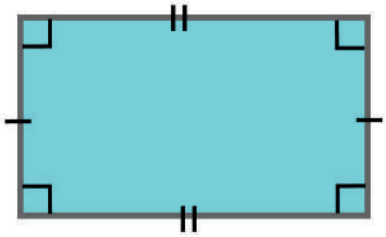


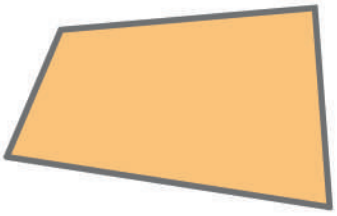




_____ _____ _____

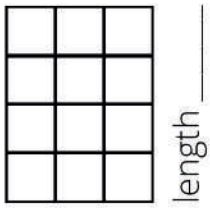






_____ _____ _____

Find the perimeter and area of each rectilinear shape.

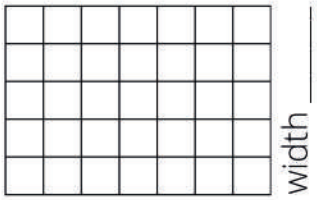


length _____

width _____

perimeter _____ units

area _____ units^2 ← what? why?

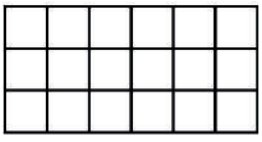


width _____

length _____

perimeter _____ units

area _____ units^2

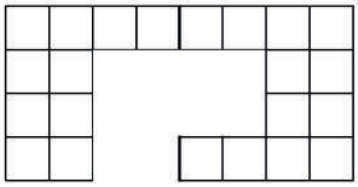


width _____

length _____

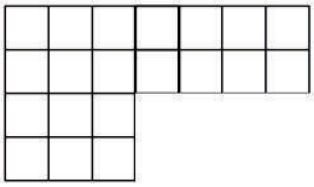
perimeter _____ units

area _____ units^2



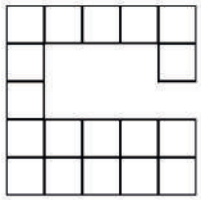
perimeter _____ units

area _____ units^2



perimeter _____ units

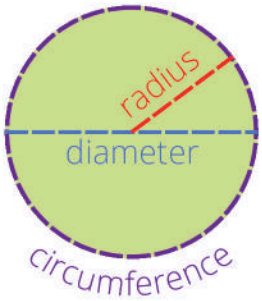
area _____ units^2



perimeter _____ units

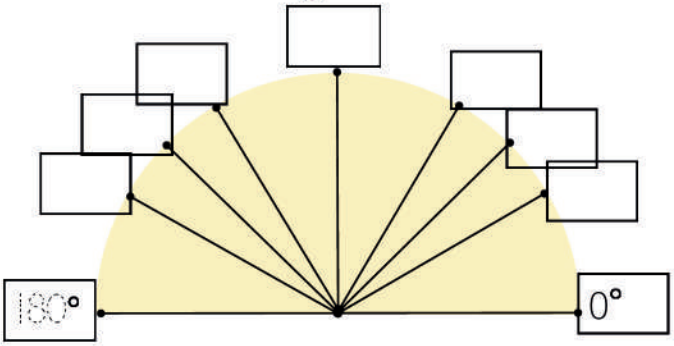
area _____ units^2

#61 Date_____

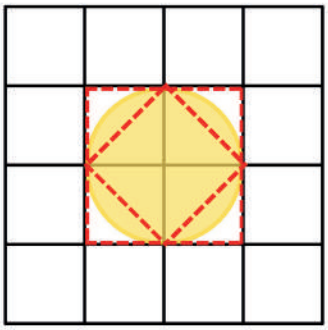


area = πr^2 ← r = radius
circumference = $2\pi r$ ↘

Fill in each angle measure.



Use the grid to estimate the area of each shape. Each square on the grid is one unit squared. Draw and label the radius, diameter and circumference.

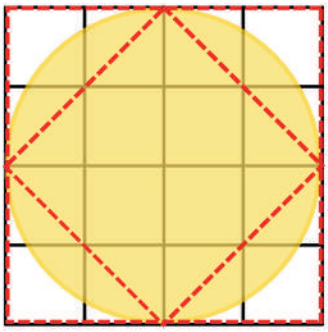


The small square is 2 square units. The big square is 4 square units. A good estimate will be between the upper and lower estimates.

estimate: 3 units^2

calculate: _____

area = πr^2 = π x $(1)^2$



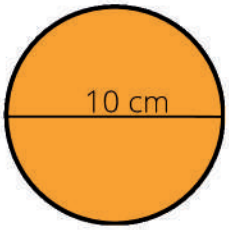
The small square is 8 square units. The big square is 16 square units. A good estimate is 12 square units, midway between the upper and lower estimates.

estimate: 12 units^2

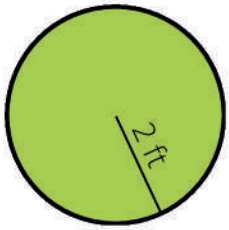
calculate: _____

area = πr^2 = π x $(2)^2$

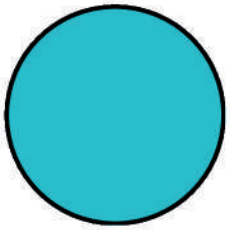
Find the dimensions of each circle based on the given dimension. (not to scale)



radius _____
diameter _____
circumference _____
area _____



radius _____
diameter _____
circumference _____
area _____

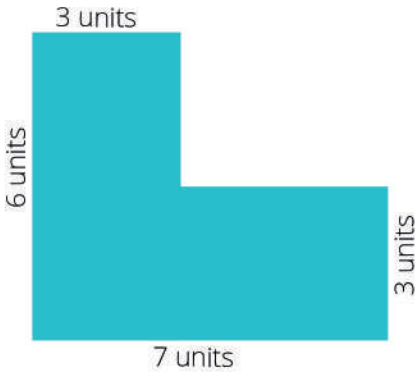


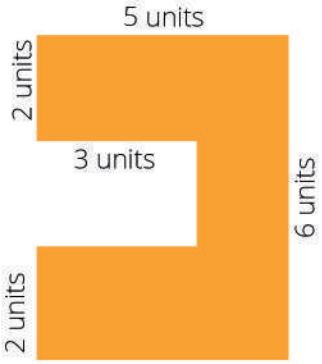
radius _____
diameter _____
circumference 314 cm
area _____

Draw lines to match the polygons across all three columns.

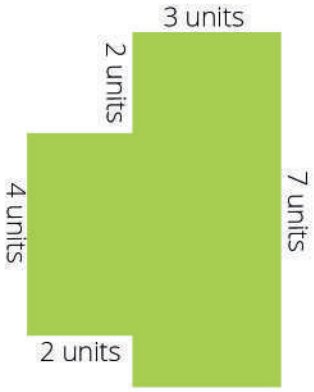
10 sides		Quadrilateral
3 sides		Heptagon
4 sides		Hexagon
5 sides		Triangle
9 sides		Octagon
6 sides		Decagon
7 sides		Nonagon
8 sides		Pentagon

Find the missing dimensions, then divide each shape into two or three rectangles. Find the perimeter and the area of each small rectangle, then add up those areas to find the area of the WHOLE shape. All of the angles are RIGHT ANGLES.





whole rectangle (5 x 6) minus cutout



_____ (length) X _____ (width) = _____ (area)

_____ (length) X _____ (width) = _____ (area)

perimeter _____ units

area _____ $units^2$

_____ (length) X _____ (width) = _____ (area)

_____ (length) X _____ (width) = _____ (area)

perimeter _____ units

area _____ $units^2$

_____ (length) X _____ (width) = _____ (area)

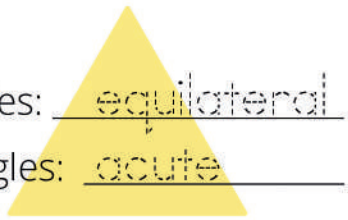
_____ (length) X _____ (width) = _____ (area)

perimeter _____ units

area _____ $units^2$

#63 Date_____

Use your ruler and protractor to classify each triangle by its sides and angles.



sides: equilateral

angles: acute

sides: _____

angles: _____

sides: _____

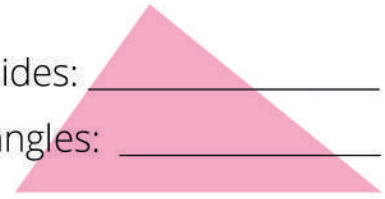
angles: _____

sides: _____

angles: _____

sides: _____

angles: _____



sides: _____

angles: _____

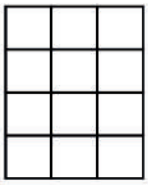
Find the area and perimeter of each shape.

3 rows, 4 columns

___ x ___ = ___

perimeter _____

area _____

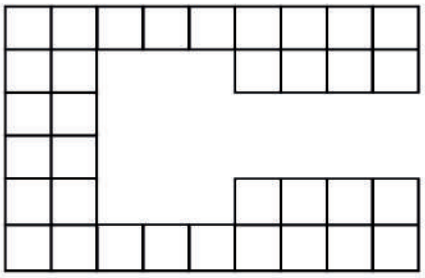


4 rows, 3 columns

___ x ___ = ___

perimeter _____

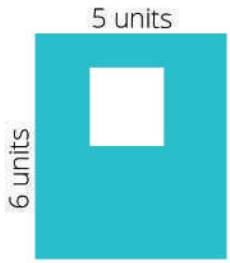
area _____



perimeter _____

area _____

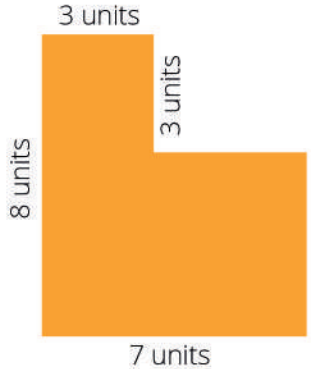
Find the perimeter and area of each rectilinear shape. Assume all angles are right angles.



The cutout is 4 sq. units

perimeter _____ units

area _____ units^2



perimeter _____ units

area _____ units^2

perimeter _____ units

area _____ units^2

Draw lines to match each quadrilateral across all three columns.

rectangle

rhombus

trapezoid

square

parallelogram

- Has two pairs of parallel sides, right angles and congruent sides.
- Has two pairs parallel sides, and four right angles.
- Has only one pair of parallel sides.
- A parallelogram with four congruent sides, but it does not have to have 4 right angles.
- Has 2 pairs of parallel sides, opposite each other.

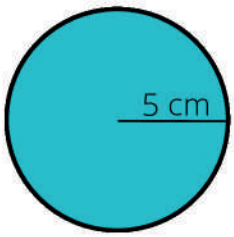
WORD PROBLEMS

What is eight times the quantity of four and three?

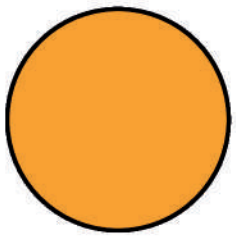
What is half of eight increased by the square root of forty-nine?

Use a ruler to draw a rectangle with a length of 10cm and a width half the length. Find the perimeter and area of the rectangle.

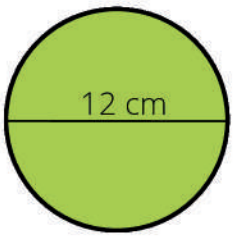
Find the dimensions of each circle based on the given dimension. (not to scale)



radius _____
diameter _____
circumference _____
area _____



radius _____
diameter _____
circumference _____
area 12.56 cm^2



radius _____
diameter _____
circumference _____
area _____

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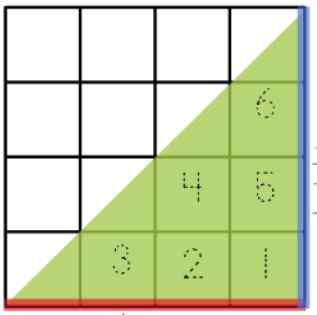
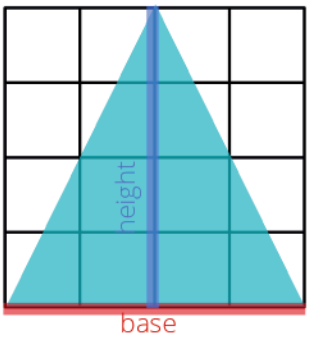
Use the grid to estimate the area of each shape. Each square on the grid is one unit squared.



The whole square is 16 square units. The triangle is half of that. You can also count the squares and add them up.

$\text{area} = \frac{1}{2}(4)(4)$ (base, height)

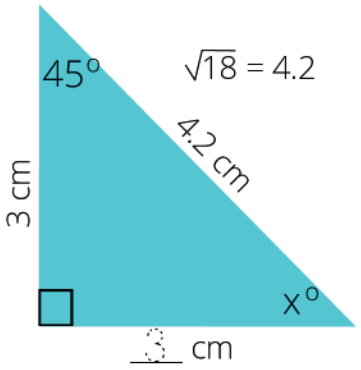
8 units²



$\text{area}_{\triangle} = \frac{1}{2}bh$ (base, height)

b (base) and h (height) must be perpendicular to each other

Find and label the missing angle and sides. Find the area and perimeter, then classify each triangle by its sides and angles.

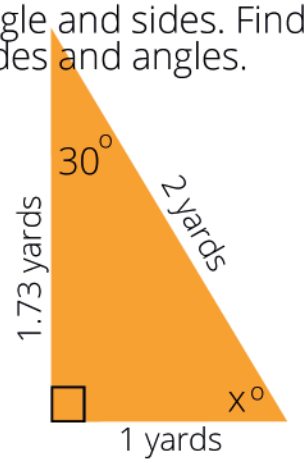


perimeter 10.24 cm

area 4.5 cm

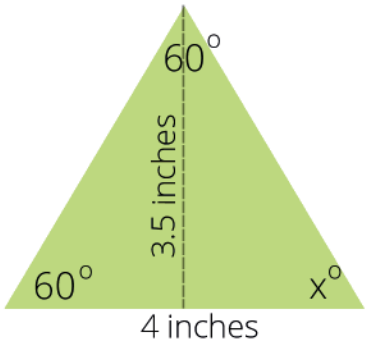
$3 + 3 + 4.2 = 10.24$

$\frac{1}{2}(3)(3) = \frac{9}{2} = 4\frac{1}{2}$



perimeter _____

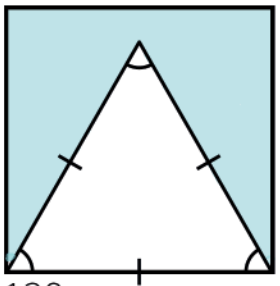
area _____



perimeter _____

area _____

The sides of the equilateral triangle are 6 inches. (not to scale)



Square:

Sides _____

Angles _____

Perimeter _____

Area _____

Triangle:

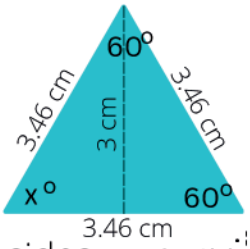
Sides _____

Angles _____

Perimeter _____

What is your best guess of the area of the shaded part of the figure?

Find the missing angle, the perimeter & area, then classify each triangle by sides (equilateral, isosceles, scalene) and angles (acute, right, obtuse). Use units.



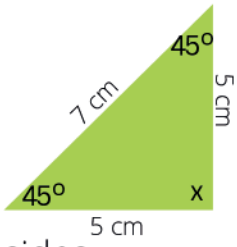
x _____

perimeter _____

area _____

sides: equilateral

angles: acute



x _____

perimeter _____

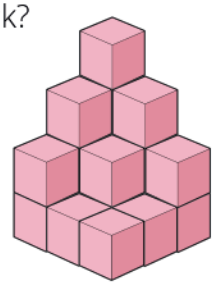
area _____

sides: _____

angles: _____

Find the quotients. (5.17)

$8\overline{)924}$ $7\overline{)781.2}$ $12\overline{)1374}$ $15\overline{)363}$ $9\overline{)803.7}$

You have three piles of books, with 7, 9 and 5 books respectively. If you redistribute the books so each piles has equal amounts, how many books will be in each pile?	The bottom layer has nine cubes. How many cubes are in this stack? 
If you take a $10 bill to the store, how many eggs can you buy? How much money will you have left over? 	Draw a picture to show that the mixed number one and one fourth and the top-heavy fraction, five fourths are equivalent.

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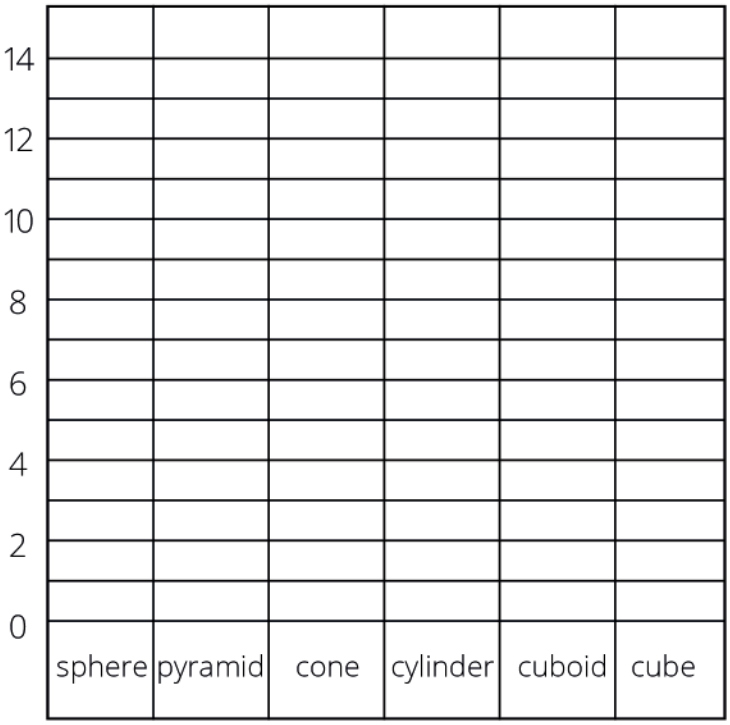
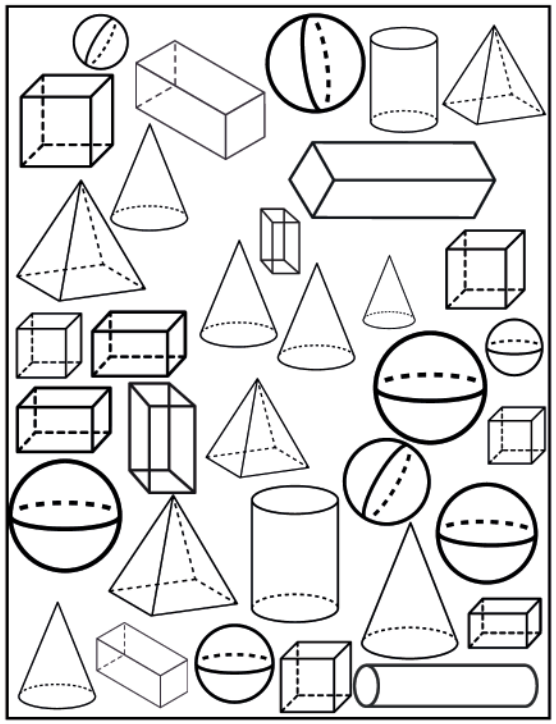
Color one space for each 3D shape to make a bar graph of shapes.



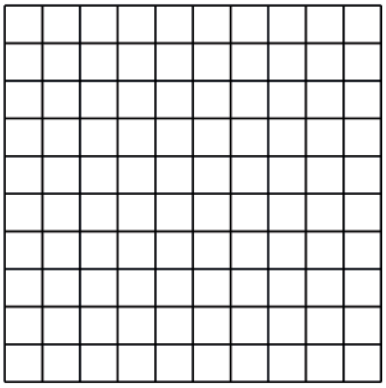


How many cents is ¼ of a dollar? What percent of a dollar is that?

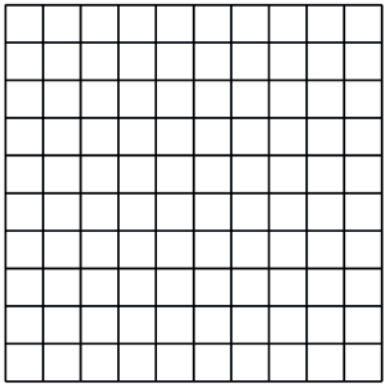
How many cents is ½ of a dollar? What percent of a dollar is that?

Draw rectangles with the following areas:

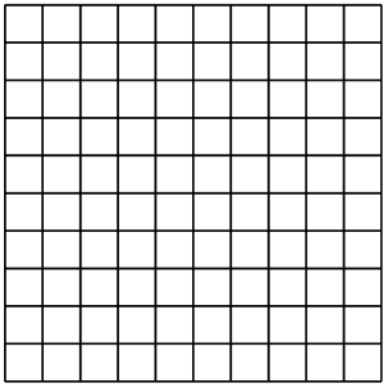
18 units^2



32 units^2



25 units^2



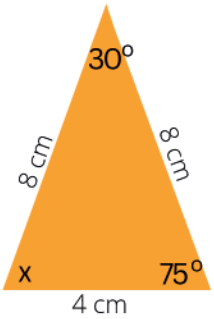
Now draw a diagonal line across each rectangle, dividing it into TWO triangles. Color one of them. What is the area of each triangle?

_____ units^2 _____ units^2 _____ units^2

A cheese pizza costs $9.95 plus $0.45 per topping. If your pizza was $11.75, how many toppings did you get?

The total price of 5 pounds of cheese was $28.75. What was the price per pound?

What is the difference when you subtract nineteen and five tenths from twenty-seven and eighteen hundredths?



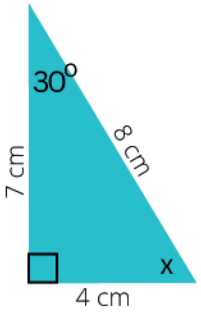
x _____

perimeter _____

area _____

sides: _____

angles: _____



x _____

perimeter _____

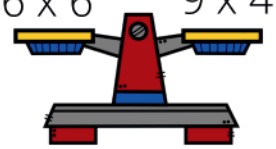
area _____

sides: _____

angles: _____

Balance these equations. Remember to follow the Order of Operations. (3.38)

6 x 6 = 9 x 4



$8^2 - 2^2 = 10 \times$ ____

$8(4 +$ ____$) = 4 \times 14$

$4 \times 3 = 6^2 \div$ ____

____ $\times 8 = 1 + 3 \times 5$

$8 +$ ____ $= 4 \times 3$

$5^2 = 35 -$ ____

$7 - 7 = 5 \times$ ____

$9 \times 8 =$ ____ $\times 6$

$2 + 6 \times 8 = 10^2 \div$ ____

$3 \times$ ____ $= 4^2 + 2$

$2 + 3 = 40 \div$ ____

$54 \div$ ____ $= \sqrt{36}$

$8 \times$ ____ $= 9^2 + 7$

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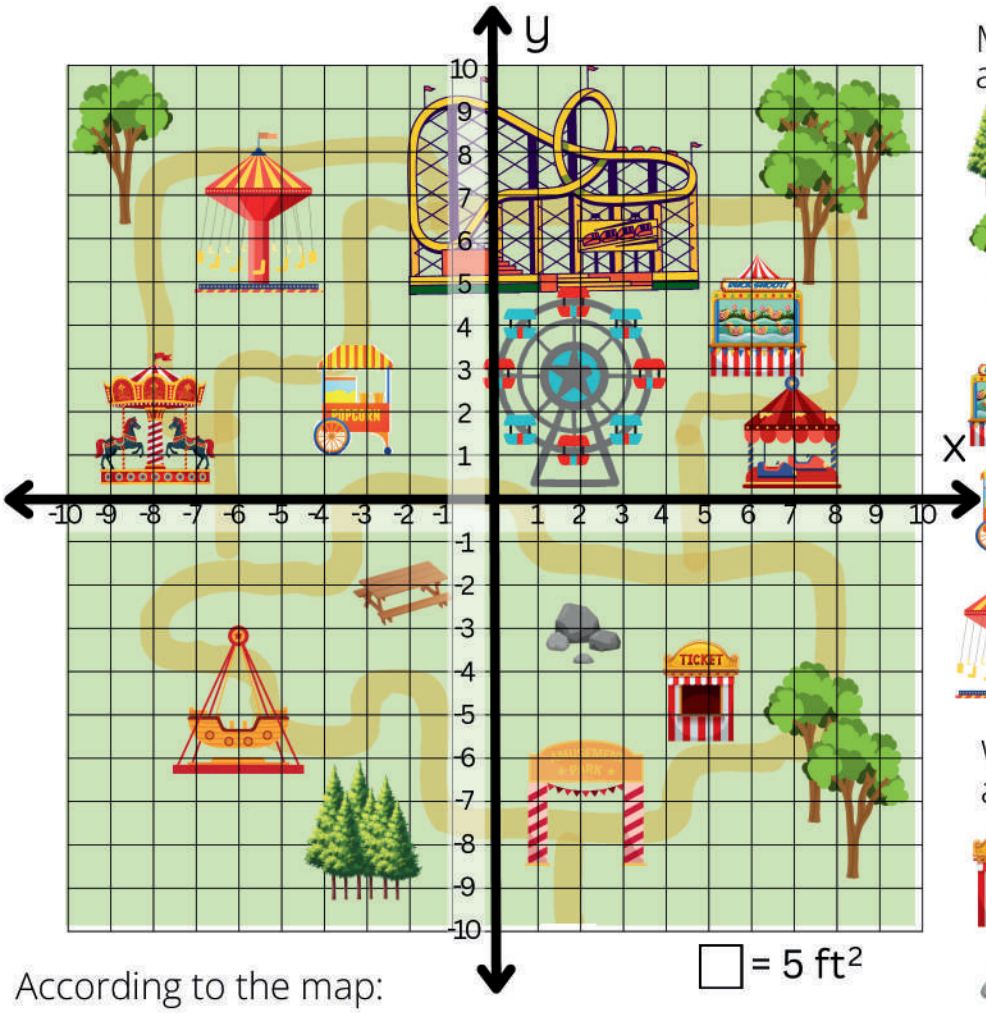

Match each item and ordered pair:

(-6, 7)

(-3, -8)

(8, -6)

(6, 4)

(-3, 2)

Write each location as an ordered pair:

(-6, 5)

According to the map:

How tall is the Ferris wheel?

What is the length of the roller coaster in the x direction?

How far is the tidal wave boat from the ticket booth?

Draw lines to match each quadrilateral to its most specific name.

rectangle square parallelogram rhombus trapezoid

Solve using the Order of Operations (PEMDAS). (3.38)

$3^2 - \sqrt{4} =$ _____

$6^2 \div 4 =$ _____

$18 \div \sqrt{36} =$ _____

$3 - 54 \div 9 =$ _____

$8(-5 - 1) \div 12 =$ _____

$-9 + 3 \times 6 =$ _____

$5 + 3 - 4^2 =$ _____

$5^2 - \sqrt{81} =$ _____

$12 + -6 \times 2 =$ _____

$7(2 \times 4) =$ _____

One fifth of the 30 students earned an A on the test. One half of the students who earned an A on the test were girls.

1. How many students earned an A on the test?
2. How many girls earned an A on the test?
3. What is the ratio of girls who earned an A to total students?

The operators are missing! Insert the correct operator (+, -, x, ÷) in each yellow circle to make the number sentence true. All answers have been simplified.

$\frac{2}{3} \times \frac{1}{4} = \frac{2}{12} \; 1\,6$

$\frac{1}{4} \bigcirc \frac{3}{4} = \frac{3}{16}$

$\frac{2}{3} \bigcirc \frac{1}{4} = \frac{5}{12}$

$\frac{1}{2} \bigcirc \frac{1}{3} = \frac{1}{6}$

$\frac{1}{2} \bigcirc \frac{2}{5} = \frac{2}{10} \; 1\,5$

$\frac{1}{6} \bigcirc \frac{1}{3} = \frac{1}{2}$

$\frac{1}{2} \bigcirc \frac{1}{4} = \frac{3}{4}$

$\frac{1}{4} \bigcirc \frac{3}{4} = \frac{1}{3}$

Find a common denominator, then add and subtract the fractions. Simplify.

$\frac{2}{3} \; 8 \; 12 - \frac{1}{4} \; 3 \; 12 = \frac{5}{12}$

$\frac{5}{8} - \frac{1}{2} \; 4 \; 8 = \frac{1}{8}$

$\frac{2}{3} - \frac{5}{12} =$

$\frac{1}{2} + \frac{2}{3} =$

$\frac{1}{2} + \frac{5}{6} =$

$\frac{1}{2} - \frac{1}{3} =$

$\frac{1}{3} + \frac{1}{4} =$

$\frac{5}{6} - \frac{5}{12} =$

$\frac{3}{4} - \frac{7}{12} =$

$\frac{3}{4} - \frac{3}{8} =$

$\frac{7}{8} - \frac{1}{4} =$

$\frac{1}{4} + \frac{5}{8} =$

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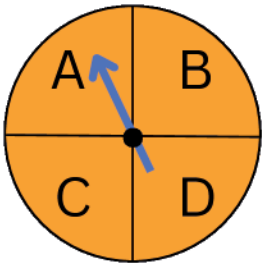


The circle is divided into 4 equal parts. If you spin the arrow, what is the probability (fraction) that it will stop on a vowel? What is the chance (percentage)?

probability = $\frac{\text{\# of vowels}}{\text{\# of sections}}$ chance = convert the fraction to a decimal

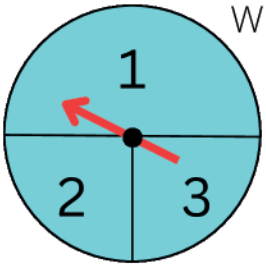
What are the probability and chance the arrow will land on a consonant?

What is the probability of rolling an even number on a die? What is the chance?

probability = $\frac{\text{\# of even}}{\text{total \#}}$ chance =

6 sides of a die:

remember to simplify!

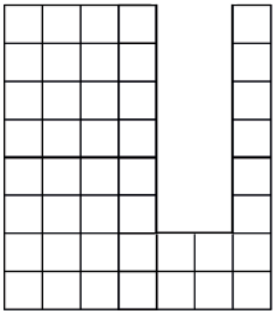


What fraction names the probability that the spinner will stop in:

The section labeled 1.

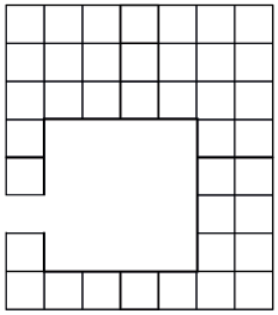
A section with an even number.

A section with an odd number.



perimeter:

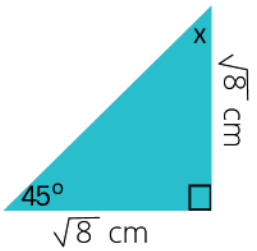
area:



perimeter:

area:

Find the missing angle, the perimeter & area, then classify each triangle by sides and angles. Use a calculator to find roots and don't forget the units. (5.64)



x _____

hypotenuse _____

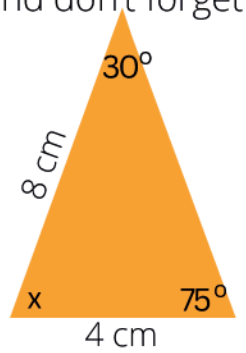
perimeter _____

area _____

Classification:

sides isosceles

angles right



x _____

height _____

perimeter _____

area _____

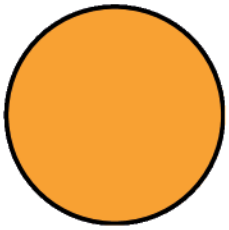
sides _____

angles _____

Find the quotients. (5.17)

11)2585 9)1422 17)14365 15)1518 12)1170

Find the dimensions of each circle based on the given dimension. (not to scale)

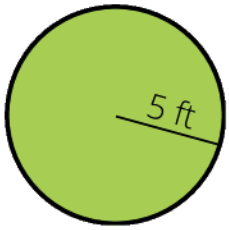


radius _____

diameter _____

circumference _____

area 153.86 in²

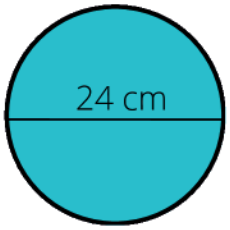


radius _____

diameter _____

circumference _____

area _____



radius _____

diameter _____

circumference _____

area _____

#69 Date_____

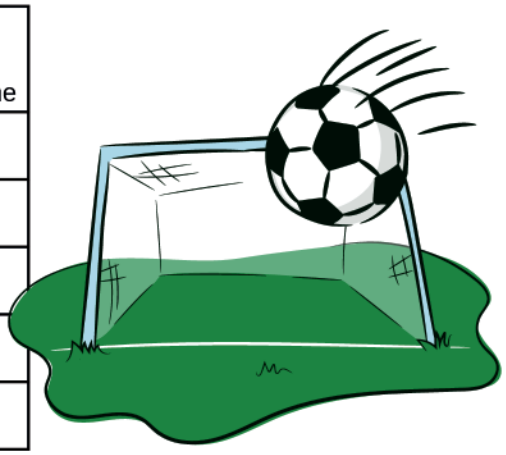
set: {34, 15, 23, 18, 23}	
order: { 15, 18, 23, 23, 34}	
mean: 113/5=22.6	median: 23
mode: 23	range: 19

set: {46, 19, 9, 42, 19}	
order: { }	
mean:	median:
mode:	range:

Your soccer coach keeps this chart to track the progress of your team.

Scrambled Legs Spring Season
individual scores per game

(team score us/them)	you	Ellie	Sam	Fran	Jose	Jerome
Game 1: 8/5	2	2	2	0	2	0
Game 2: 4/6	0	2	0	2	0	0
Game 3: 8/7	2	2	2	0	2	0
Game 4: 12/4	4	2	2	2	2	0
Game 5: 8/13	2	0	0	4	2	0



For the first five games:

What was your mean score?

What was Fran's mean score?

What was your team's mean score?

What percent of the games did your team win?

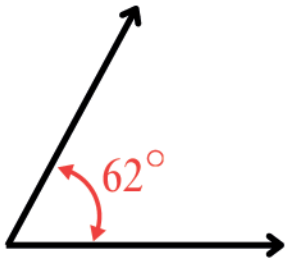
What percent of the games did your team lose?

Which player on your team is the most likely to score points?

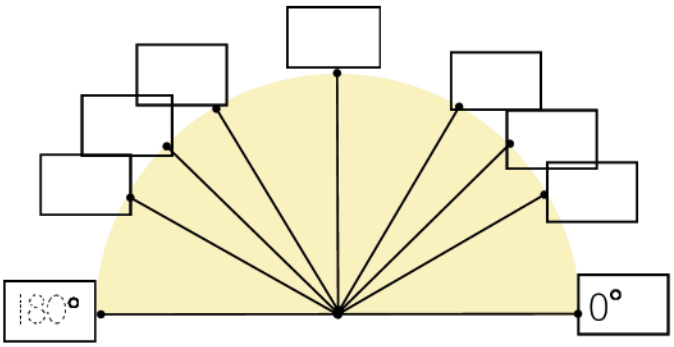
Who on your team is the least likely to score points?

What is your team's median score?

Draw and find the complement and the supplement of this angle.



Fill in each angle measure.



Your scores for the spelling tests are 19, 16, 20, 17, 18, 16 and 20. There were 20 points possible on each test. Find the following:

mean _____ median _____ mode _____ range _____

What is your overall test score in spelling? (Find the MEAN percentage)

$$\text{percent} = \frac{\text{mean} \times 5}{20 \times 5} = \frac{\quad}{100} \leftarrow \text{percent}$$

Trace then write each term, then draw a line to match each term to its definition.

average

chance

probability

median

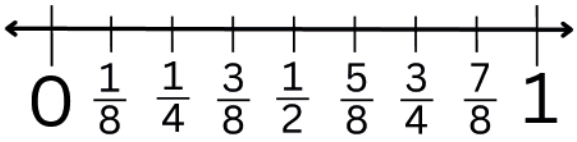
mode

range

- the middle number when a set of values is arranged from smallest to largest.
- The number that appears most frequently.
- Also known as the mean, we add all of the addends, then divide the SUM by the number of addends.
- The distance between the highest and the lowest numbers.
- The likelihood that something will happen, stated as a fraction.
- The likelihood that something will happen, stated as a percentage.

#70 Date_____

We are collecting milk for the food bank. Use an X to represent each amount on the line plot.



How much milk have you collected?

Histogram

Histograms use bins to display the frequency of numerical values in a data set. The bins are organized into equal, non-overlapping intervals. Since the numerical values show a continuous range, the bins touch.

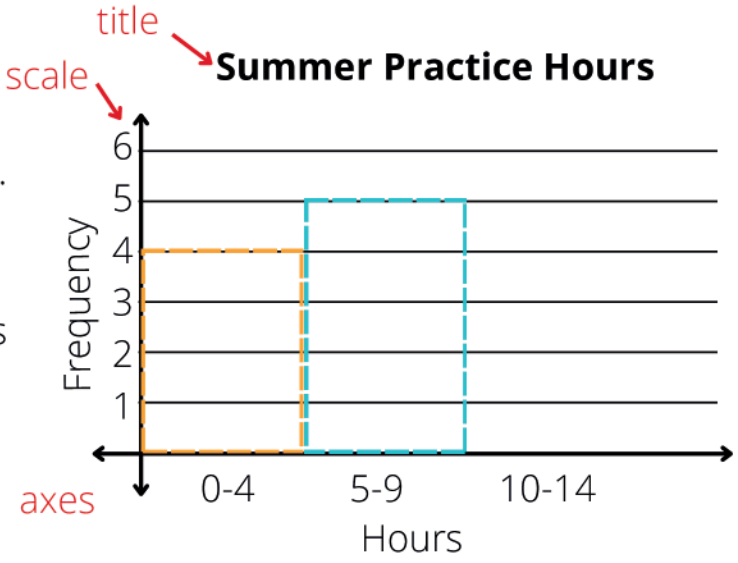
Step 1: This is how many hours you practiced piano each week all summer. Create a frequency table of these values:
3, 7, 2, 4, 10, 8, 5, 12, 4, 7, 9, 9, 11

Make sure the intervals are equal and don't overlap.

Value	Tally	Frequency
0-4		
5-9		
10-14		

Step 2: Set up your graph. Title it. Label the axes and include a scale.

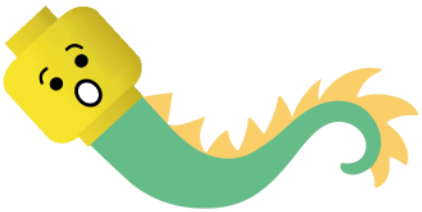
Draw and color the bins so they represent your frequency chart. The bins touch because the values are continuous.



mean _____ mode _____

median _____ range _____

What has a *head* and a *tail*, but no body?



_____	_____	_____	_____	_____
18	-16	7	3	5

Solve using the Order of Operations (PEMDAS). (3.38)

A $2(6^2 \div 4) =$ _____

E $3\sqrt{100} \div 5 =$ _____

I $2(5 + 4) \div 3 =$ _____

O $\sqrt{49} =$ _____

U $8 \times 5 \div 4 =$ _____

S $6 \times 4 - 3 \times 9 =$ _____

T $5 - 5 \times 3 =$ _____

R $4^2 - 4\sqrt{25} =$ _____

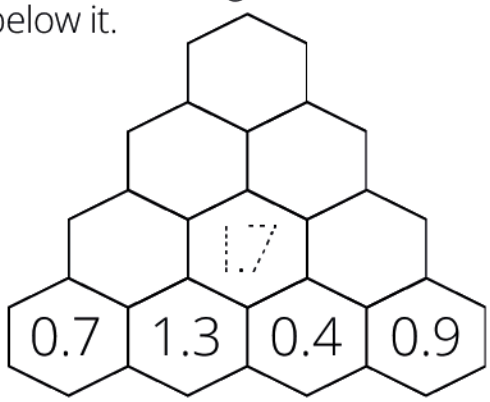
C $2^3 \div 4 - 3 \times 6 =$ _____

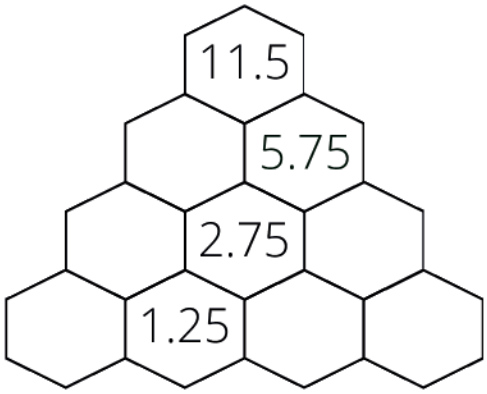
M $8(3 + 4) =$ _____

N $\sqrt{36} - 1 =$ _____

F $5(3 + 3) =$ _____

Find the missing numbers in each empty hexagon by adding the two numbers below it.





Write operators (x, ÷, +, -) in all of the empty squares to make each number sentence true. Remember to apply the Order of Operations, PEMDAS. (3.38)

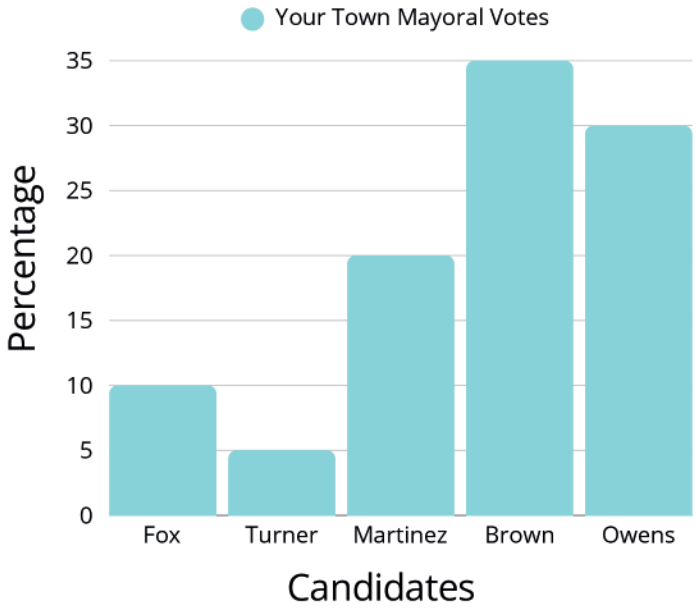
4^2	÷	2	-	3^2	=	-1
2^3		7		1	=	1
-2		9		2	=	5
=		=		=		=
0		5		6	=	-6

12	-	3	x	5	=	-3
0		2		1	=	3
6^2		4		5	=	4
=		=		=		=
36		3^2		0	=	4

3^2	-	18	÷	2	=	0
5		8^2		4^2	=	1
2		8		8	=	2
=		=		=		=
-1		10		0	=	0

#71 Date_____

1000 residents of your town voted for a new mayor. These are the results. The scale on the y axis is the percentage of voters for each candidate.



How many residents voted for each candidate?

10% of 1000 = 1000 x 0.10 = 100

Fox 100

1000 x 0.05 =

Turner _____

Martinez _____

Brown _____

Owens _____

Do the votes for the candidates add up to the total number of voters? _____

What percent of voters did not vote for Martinez? _____

Double Bar Graph

Your Grandma owns two bakeries, one in Fairview and one in Pleasanton. She needs your help to figure out which items sell best. You create a graph.

Which item is most popular at Fairview?

_____

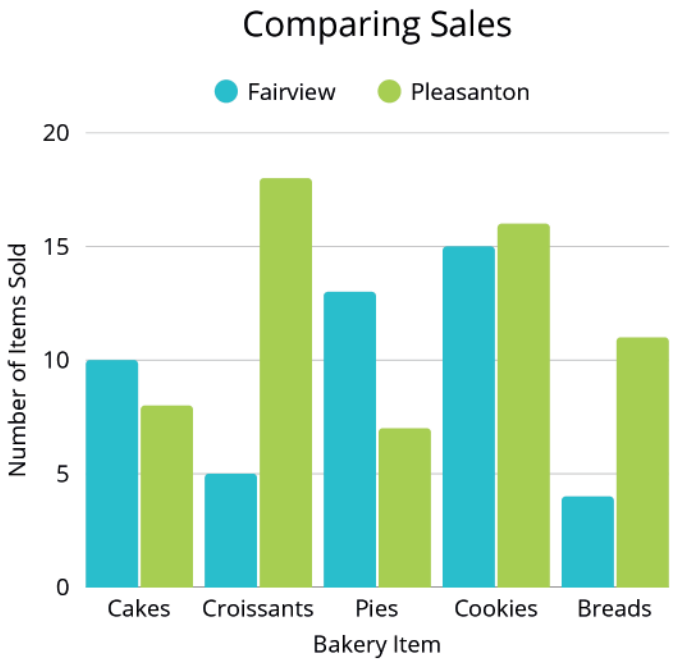
Which item is most popular at Pleasanton? _____

How many croissants were sold by each store? _____

How many croissants were sold by both stores? _____

Which store sold the most items altogether? _____

How could this information help a business owner? _____



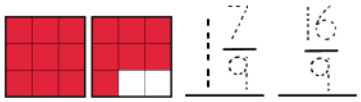
Draw a circle. Shade all but ⅙ of it. What percent of the circle is shaded?

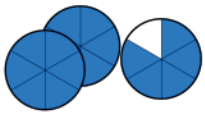
Jung Chang wrote a book in 1991 about her experiences during the Chinese Cultural Revolution in 1966. How many years after her experience did she write her story?

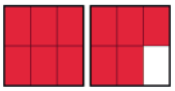
Draw and shade circles to show the mixed number 2 ¾ as an improper fraction.

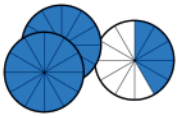
What time is 25 hours after midnight?

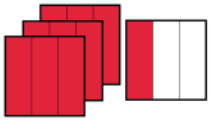
Name these fractions as mixed numbers and improper fractions. (5.30)

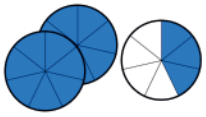












Find the mean, median, mode and range of each set of game scores.

Scores	Re-order	Mean	Median	Mode	Range
6, 11, 8, 7, 3	3, 6, 7, 8, 11	7	5		8
7, 7, 9, 4, 3					
7, 8, 10, 5, 10					
11, 5, 2, 9, 4, 10, 8					
14, 5, 8, 8, 10, 7, 11					

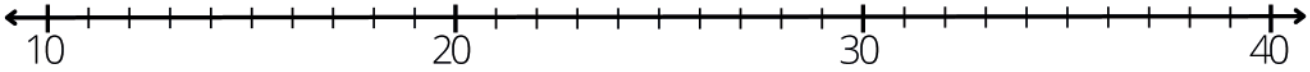
#72 Date_____

Create box plots then find the mean, mode, median and range for each data set.

1) 17, 31, 20, 21, 19, 17, 25, 23, 30, 18, 22

Re-order: 17, 17, 18, 19, 20, 21, 22, 23, 25, 30, 31

Maximum _____ Minimum _____ Median _____ Q1 _____ Q3 _____

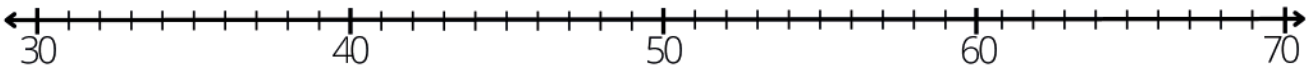


mean _____ mode _____ median _____ range _____

2) 68, 31, 63, 55, 39, 47, 45, 53, 60, 38, 32, 59, 58

Re-order:

Maximum _____ Minimum _____ Median _____ Q1 _____ Q3 _____

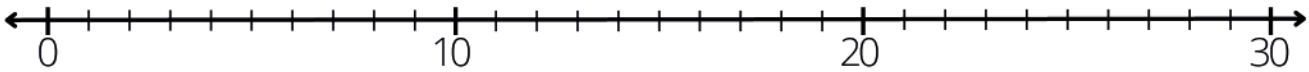


mean _____ mode _____ median _____ range _____

3) 9, 28, 20, 27, 19, 7, 21, 27, 6, 18

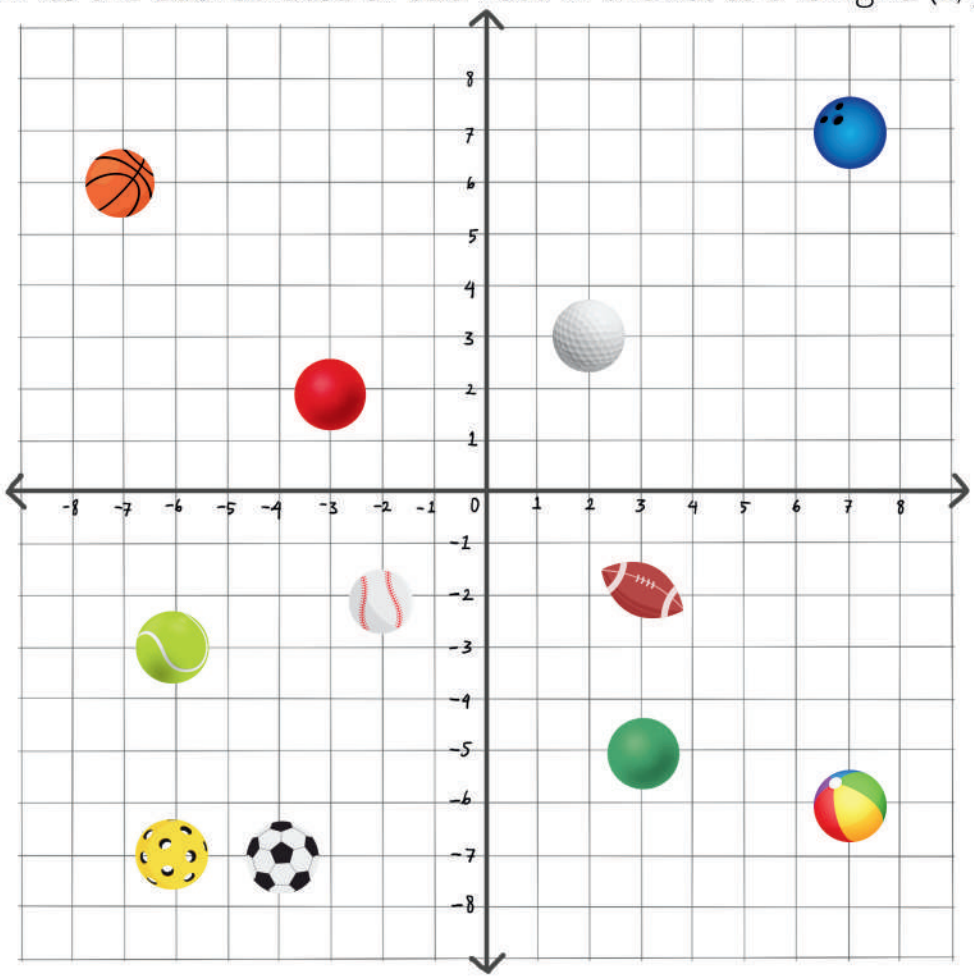
Re-order:

Maximum _____ Minimum _____ Median _____ Q1 _____ Q3 _____



mean _____ mode _____ median _____ range _____

Write the coordinates of each ball in the list to the right. (x, y)




(-7, 6)


(,)


(,)


(,)


(,)


(,)


(,)


(,)


(,)

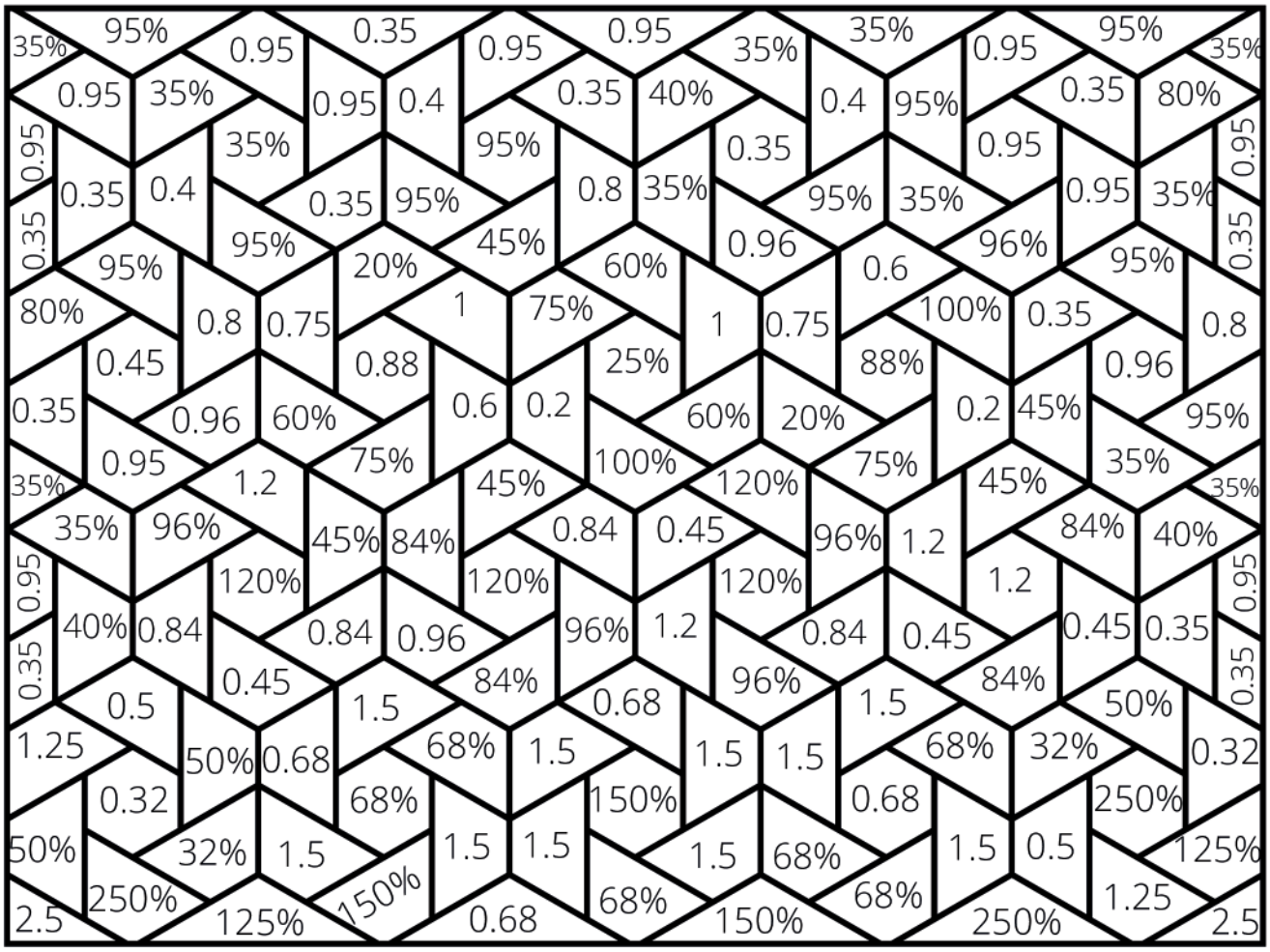

(,)

How many balls are in quadrant IV?

Which quadrant has the most balls?

Start the maze with zero. Add the number in each successive space. You must finish with a total of ten. There are three possible routes.

START	1.6	2.3	0.9	1.2
0.6	0.8	1.7	2.1	0.7
1.4	1.9	1.6	0.3	2.2
1.8	1.7	1.5	2.4	0.4
0.8	1.6	2.6	0.9	END



Fraction	Decimal	Percent
22/25 =	0.88	= 88%
21/25 =		
3/4 =		
3/5 =		
9/20 =		
19/20 =		
2/5 =		
1/2 =		
17/25 =		
8/25 =		

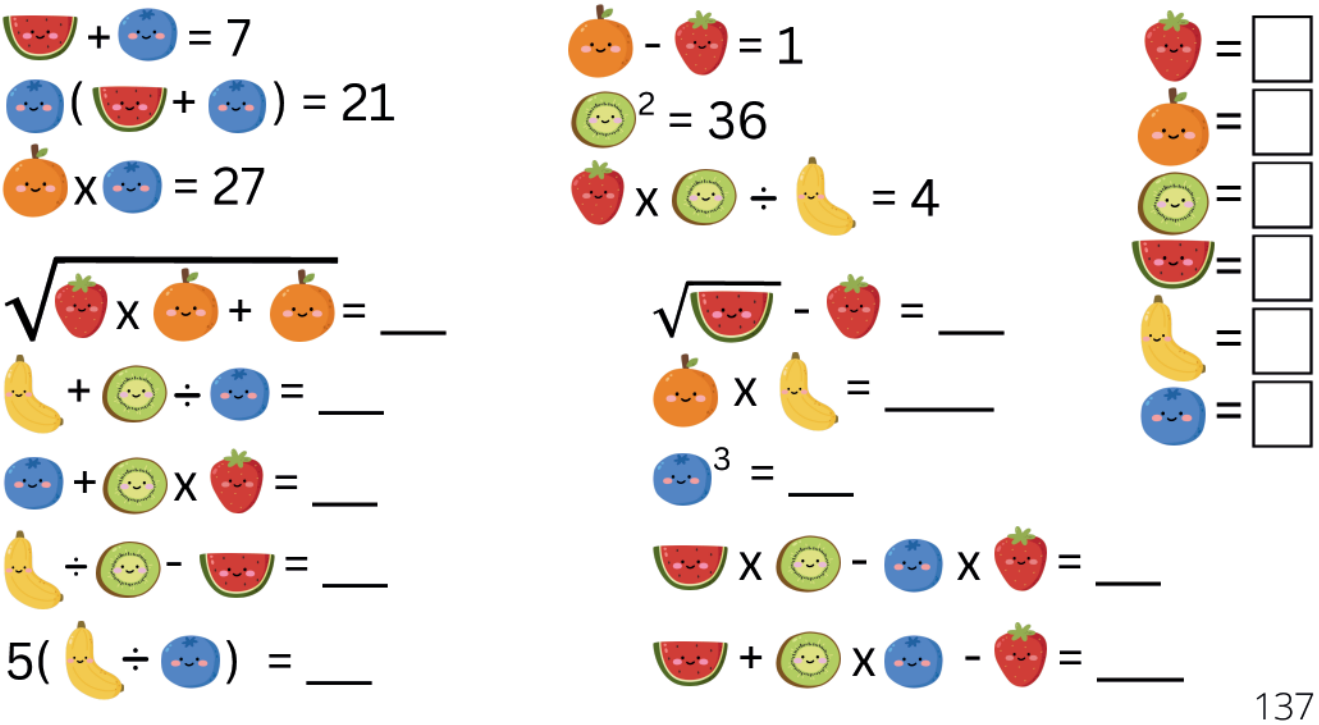
Fraction	Decimal	Percent
1/4 =		
12/10 =		
4/4 =		
1/5 =		
24/25 =		
7/20 =		
4/5 =		
5/2 =		
3/2 =		
5/4 =		

Find each product or quotient horizontally, vertically or diagonally.

9.12 x 10
612/180
12.3 x 18
8.1 x 6
2142/28
26.3 x 33.2
284.52/12
247/49.4
13.4 x 7
2008.6/5.5
33.3 x 3
25.4/5
143.5 x 6
81.9/13

7	1	5	2	1	6	4	8	3	9	2
2	9	0	2	8	4	8	.	6	.	3
4	0	9	1	.	2	.	3	5	7	.
3	2	4	.	3	9	5	6	.	8	7
6	8	3	4	9	0	4	7	2	0	1
8	3	8	7	3	.	1	6	6	2	9
0	.	2	6	7	3	5	.	0	8	9
9	4	1	3	1	8	0	5	2	6	7

Find the value of each piece of fruit, then solve each problem.



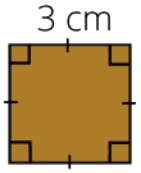
Each group contains two truths and one lie. Circle the lie in each box.

1) $6 \times 3 = 36/2$ 2) $12/2 = 2^2$ 3) $2^2 = 36/9$	1) $\frac{1}{2} > \frac{1}{4}$ 2) $2 = 6/3$ 3) $\frac{3}{4} < \frac{1}{2}$	1) 5.8 m = 580 cm 2) 58 cm = 580 mm 3) 58 km = 58 m
1) 12 km = 120 cm 2) 12 cm = 120 mm 3) 1.2 m = 120 cm	1) $5 \times 12 = 6 \times 10$ 2) $8 \times 3 \div 4 = 4 + 2$ 3) $8^2 = 8 + 8$	1) $8/16 > 6/18$ 2) $5/15 > 9/16$ 3) $13/15 < 3/5$
1) $1\frac{3}{4} = 11/4$ 2) $2/4 = 5/10$ 3) $9/8 = 1\frac{1}{8}$	1) $24 = 2^3 \times 3$ 2) $28 = 2^2 \times 7$ 3) $32 = 2^4$	1) $56/7 = 2 \times 4$ 2) $5 \times 3 = 6 + 7$ 3) $3(2 + 4) = 9 \times 2$

MYSTERY PICTURE

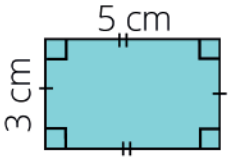
What has a neck but no head?

10	5	31.4	5	10	12	9	12	5	78.5	10	31.4	5
5	31.4	5	10	78.5	9	12	9	31.4	5	78.5	10	10
10	78.5	10	31.4	5	12	9	12	10	31.4	5	5	10
5	31.4	5	10	78.5	16	15	16	5	78.5	10	31.4	5
78.5	5	31.4	5	10	15	16	15	78.5	10	31.4	5	78.5
5	31.4	5	10	78.5	16	15	16	5	78.5	10	31.4	5
10	78.5	10	31.4	16	15	16	15	16	31.4	5	5	10
31.4	5	10	15	16	15	16	15	16	15	31.4	10	78.5
5	31.4	15	16	15	16	15	16	15	16	15	31.4	5
10	78.5	17	13.5	17	13.5	17	13.5	17	13.5	17	10	5
31.4	5	13.5	17	13.5	17	13.5	17	13.5	17	13.5	5	78.5
10	78.5	10	13.5	17	13.5	17	13.5	17	13.5	5	5	10
31.4	5	10	78.5	17	13.5	17	13.5	17	5	31.4	10	78.5



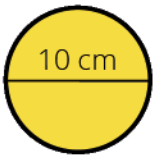
Perimeter:

Area:



Perimeter:

Area:

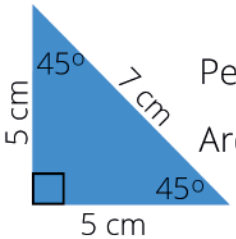


Radius:

Diameter:

Perimeter:

Area:

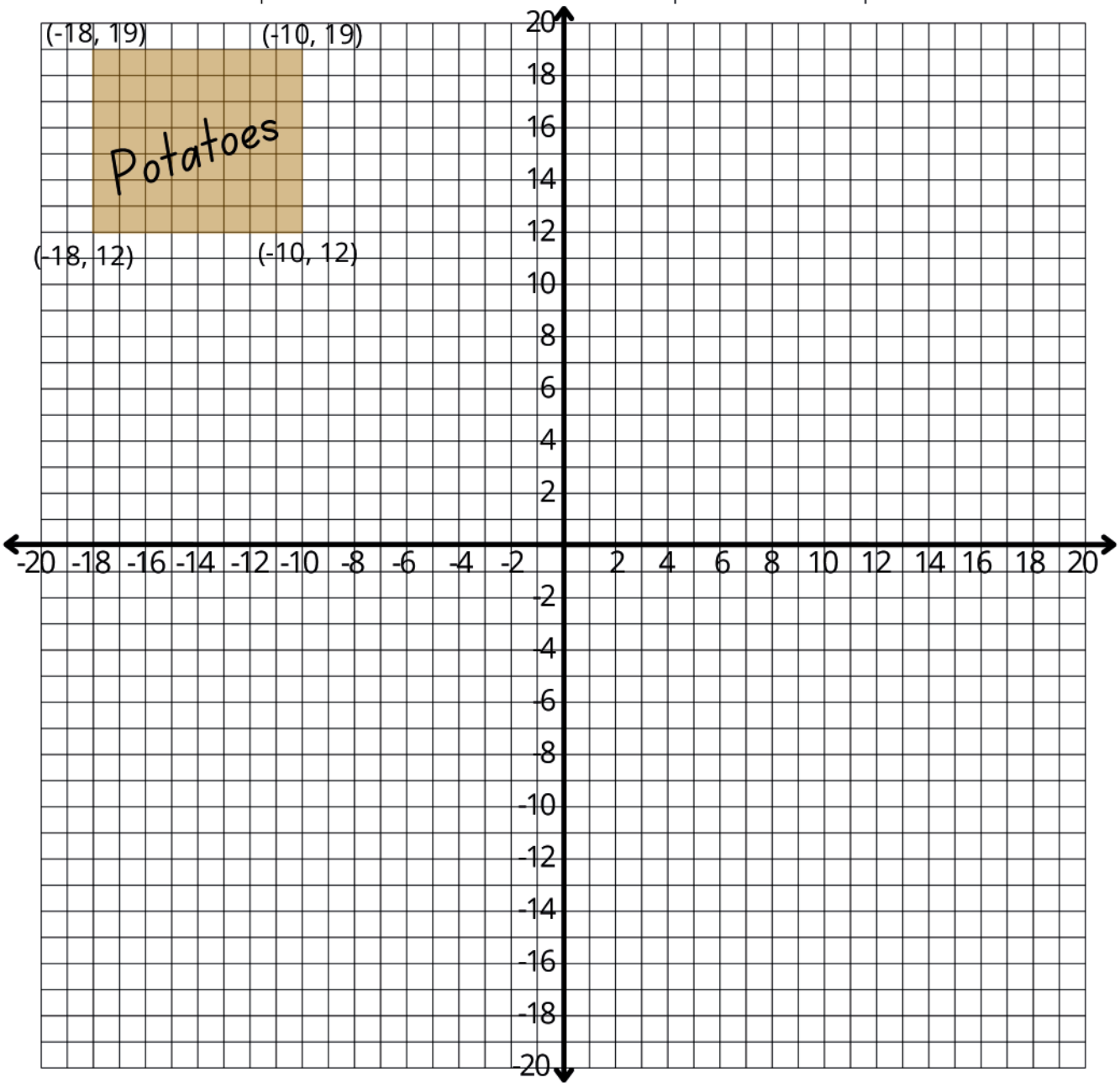


Perimeter:

Area:

Use this grid paper to plan your garden. Draw a rectangular space for each crop, the area specified, then label each corner with an ordered pair (x, y).

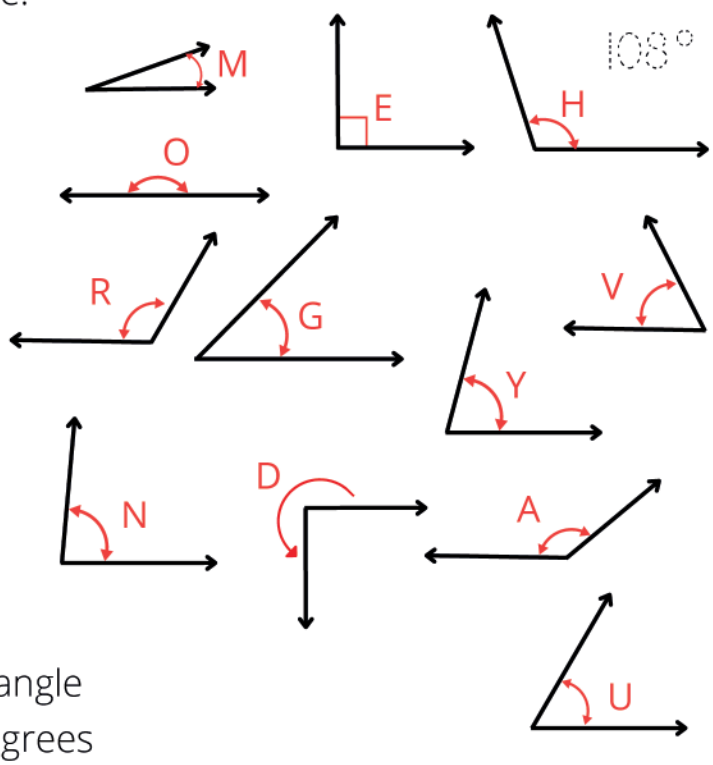
Potatoes	56 sq. units	Flowers	72 sq. units
Carrots	18 sq. units	Tomatoes	48 sq. units
Beets	36 sq. units	Squash	36 sq. units
Lettuce	24 sq. units	Onions	15 sq. units
Beans	60 sq. units	Spinach	30 sq. units



Divide the plot for flowers in half diagonally. Plant one triangle with daisies and one triangle with mums. How much area is each?

Divide the plot for squash in half diagonally. Plant one triangle with pumpkins and the other with zucchini. How much area is each?

Use your protractor to find the measure of each angle and label it. Use the clues below to get some really great advice.



___ supplement to 72 degrees
___ complement to 30 degrees
___ complement to 45 degrees
___ complement to 15 degrees
___ a straight angle
___ complement to 30 degrees
___ supplement to 60 degrees
___ complement to 70 degrees
___ a straight angle
___ supplement to 160 degrees
___ supplement to 40 degrees
___ 80 degrees
___ reflex angle
___ 270 degrees
___ 140 degrees
___ reflex angle

___ right angle
___ 65 degrees
___ right angle
___ 120 degrees
___ 75 degrees

___ reflex angle
___ supplement to 40 degrees
___ complement to 15 degrees

Fill in each blank with one of these multipliers or divisors to make each equation true.

312 _____ = 0.312
2.4 _____ = 240
0.67 _____ = 670
83 _____ = 8.3
11.4 _____ = 114
2.91 _____ = 291
15 _____ = 15000
0.15 _____ = 150
940 _____ = 94
708 _____ = 7.08

541 _____ = 54.1
17 _____ = 0.17
3.5 _____ = 3500
12 _____ = 0.012
75 _____ = 0.75
75 _____ = 750
75 _____ = 7.5
75 _____ = 7500
99 _____ = 0.99
99 _____ = 9.9

x 10
x100
x1000
÷ 10
÷100
÷1000