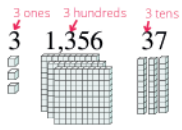
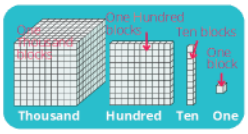
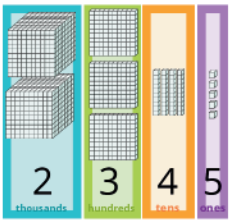
Date _____

What is Place Value?

The **place** of a digit in a number determines its **value**. For example, the number 3 has a different value in each of the following numbers:







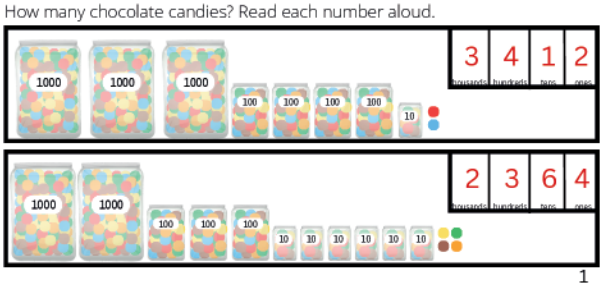
All about the number 2,345:

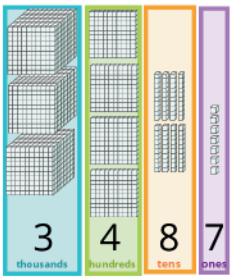
1. How many ones are in this number? 5
2. How many hundreds are in this number? 3
3. How many thousands are in this number? 2
4. How many tens are in this number? 4
5. Which number is in the hundreds place? 3
6. Which number is in the thousands place? 2
7. Which number is in the ones place? 5

Two thousand three hundred forty-five

2000 + 300 + 40 + 5

How many chocolate candies? Read each number aloud.



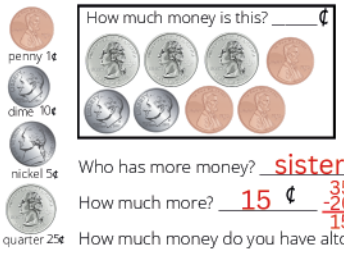


All about the number 3,487:

1. How many ones are in this number? 7
2. How many hundreds are in this number? 4
3. How many thousands are in this number? 3
4. How many tens are in this number? 8
5. Which number is in the hundreds place? 4
6. Which number is in the thousands place? 3
7. Which number is in the ones place? 7

Three thousand four hundred eighty-seven

3000 + 400 + 80 + 7



You have 2 dimes and your sister has 7 nickels.

You 20 ¢

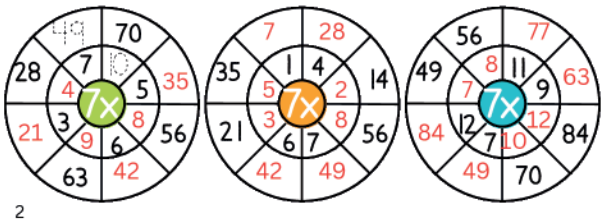
Sister 35 ¢

Who has more money? sister

How much more? 15 ¢ 35 − 20 = 15

How much money do you have altogether? 55 ¢ 35 + 20 = 55

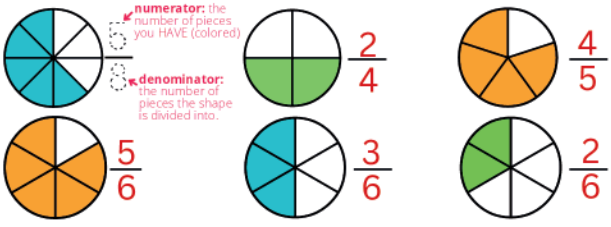
Fill in the blanks of these multiplication circles so that the outer circle is the PRODUCT of the middle circle and the innermost circle.



Put these numbers in order from smallest to largest.

47 42 74	42 (smallest)	47	74 (largest)	
141 325 114 355	114 (smallest)	141	325	355 (largest)
167 182 176 148	148 (smallest)	167	176	182 (largest)
102 120 118 201 210	102 (smallest)	118	120	201	210 (largest)
95 209 232 290 223	95 (smallest)	209	223	232	290 (largest)

Label the fractions, then name them aloud.



Continue each pattern:

7, 14, 21, 28, 35, 42, 49, 56, 63, 70, 77

5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60

3, 13, 23, 33, 43, 53, 63, 73, 83, 93, 103, 113

Draw a HORIZONTAL line and a VERTICAL line to divide this square into FOURTHS.

Draw 3 HORIZONTAL lines to divide this square into FOURTHS.

Use two OBLIQUE lines to divide this square into FOURTHS.

Draw 3 VERTICAL lines to divide this square into FOURTHS.

PARALLEL lines never intersect. Lines that intersect at RIGHT ANGLES (90 degrees) are PERPENDICULAR. Draw the following:

Parallel Lines	Perpendicular Lines (draw a square in the RIGHT ANGLE to show that it's perpendicular)	Intersecting Lines that are neither parallel nor perpendicular

Number each clock face, then draw the hands to show:

Half past eleven | Quarter before twelve | Twelve o'clock

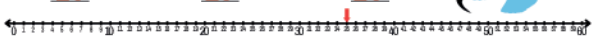
Rounding Steps:

1. Circle the digit in the place to which you are rounding.
2. Look at the digit in the next place to the right. If it's 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:

Four or less? Let it rest.
Five or more? Let it soar.

35 40	67 70	55 60
17 20	12 10	15 20



Round to the nearest HUNDRED:

305 300	564 600	675 700	353 400
013 100	421 400	231 200	649 600
250 300	115 100	254 300	528 500

Round to the nearest THOUSAND:

1550 2000	1464 1000	2751 3000	2133 2000
3012 3000	421 0	2310 2000	649 1000
1488 1000	1110 1000	1254 1000	1728 2000

1743 (thousands, hundreds, tens, ones)

1107 (thousands, hundreds, tens, ones)

Round to the nearest TEN	1740	Round to the nearest TEN	1110
Round to the nearest HUNDRED	1700	Round to the nearest HUNDRED	1100
Round to the nearest THOUSAND	2000	Round to the nearest THOUSAND	1000

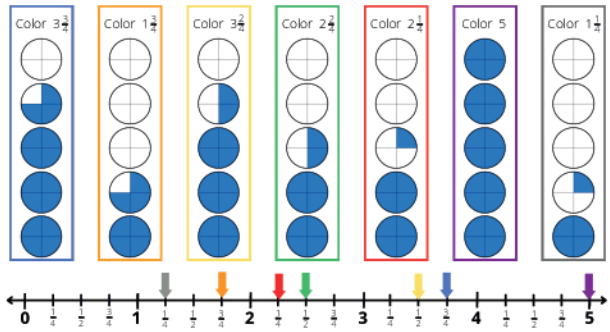
Color pieces of each shape to match the fraction in front of it.

What do each of these fractions have in common? they're all equal to one half

Fill in the boxes with the missing addends.

67 +21 = 88	22 +13 = 35	34 +50 = 84	11 +37 = 48	35 +20 = 55
24 +32 = 56	26 +12 = 38	15 +82 = 97	32 +52 = 84	33 +12 = 45

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



I ½ ½ MATH

Trace all of the HORIZONTAL lines green. Trace all of the VERTICAL lines red. Trace all of the OBLIQUE lines blue.

Divide the heart into two equal halves with a VERTICAL line. Label each half with a fraction and color the LEFT half red.

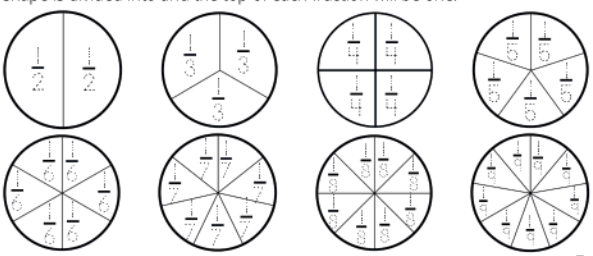
Insert the correct comparison symbol between the numbers to compare them.

202 < 220	501 = 501	110 > 101
453 > 435	492 > 429	345 < 354

Order these numbers from smallest to largest.

111 209 141 290 114	111 (smallest)	114	141	209	290 (largest)
89 102 98 201 210	89 (smallest)	98	102	201	210 (largest)
179 132 155 123 197	123 (smallest)	132	155	179	197 (largest)

Label each piece of each circle with the correct fraction. Remember, the DENOMINATOR (the bottom of each fraction) is the NUMBER of pieces the shape is divided into and the top of each fraction will be one.



Fill in the missing addends or sum to complete each number sentence.

3 + 7 = 10	1 + 3 = 4	1 + 7 = 8
4 + 3 = 7	9 + 0 = 9	4 + 5 = 9
2 + 7 = 9	2 + 8 = 10	3 + 5 = 8
4 + 4 = 8	4 + 1 = 5	2 + 5 = 7

Find the sums without regrouping.

23 + 13 = 36	52 + 14 = 66	31 + 27 = 58	18 + 20 = 38	25 + 24 = 49

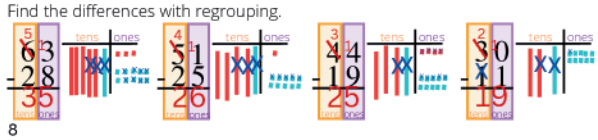
Find the differences without regrouping.

42 - 12 = 30	34 - 21 = 13	35 - 11 = 24	57 - 36 = 21	25 - 10 = 15

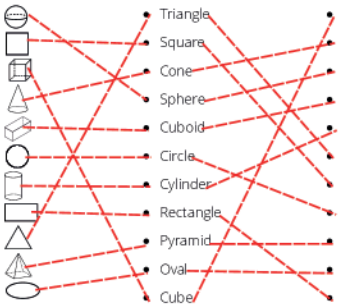
Find the sums with regrouping.

194 + 183 = 584	148 + 285 + 45 = 478	407 + 115 + 195 = 717	127 + 133 + 585 = 845	214 + 236 + 125 = 575

Find the differences with regrouping.



Match each shape to its name and attributes.

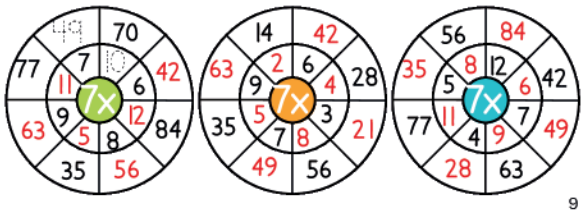


Triangle	12 edges all the same length
Square	One vertex, one circular side
Cone	No edges or vertices, 3D
Sphere	8 vertices, only 2 sides are squares
Cuboid	3D with 2 circular ends
Circle	3 sides
Cylinder	4 sides, all the same length
Rectangle	Closed, curved, 2D shape
Pyramid	One vertex, one square side
Oval	No edges or vertices, but not a circle
Cube	4 sides, not the same length

How much money is this?

$1.61 $2.52 $1.77 $2.56 $1.95

Fill in the blanks of these multiplication circles so that the outer circle is the PRODUCT of the middle circle and the innermost circle.



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Find the sums with regrouping.

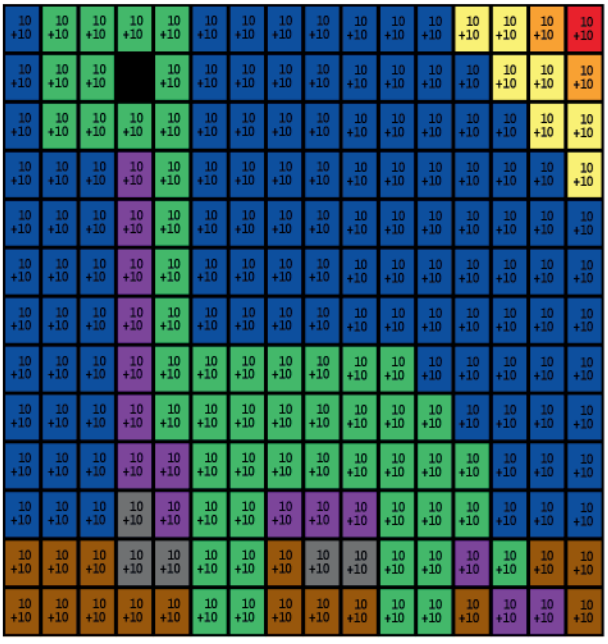
172 + 188 = 360	244 + 176 = 420	724 + 193 = 917	185 + 383 = 568	214 + 125 = 339
117 + 104 = 221	153 + 348 = 501	212 + 179 = 391	227 + 364 = 891	275 + 225 = 800
138 + 265 = 403	299 + 347 = 646	237 + 195 = 432	367 + 335 = 702	150 + 150 = 300

Find the differences with regrouping.

50 − 25 = 25	61 − 27 = 34	38 − 29 = 9	62 − 38 = 24

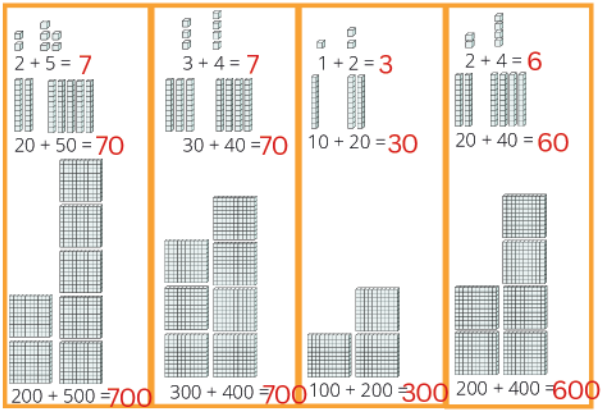
Fill in each square with factors such that the product of each set of factors, horizontally and vertically, are correct.

7 7 49 8 7 56 56 49	7 2 14 7 4 28 49 8	7 9 63 3 2 6 21 18	7 1 7 8 9 72 56 9
7 6 42 9 5 45 63 30	7 8 56 2 3 6 14 24	7 3 21 10 7 70 70 21	7 4 28 3 6 18 21 24
7 4 28 4 8 32 28 32	7 10 70 5 9 45 35 90	7 5 35 6 6 36 42 30	7 8 56 9 5 45 63 40



add zero
add one
add two
tens partners
none of these
doubles
doubles plus one
add nine
add ten
add 100, 1000

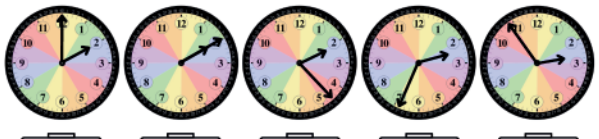
Date _____



Find the sums.

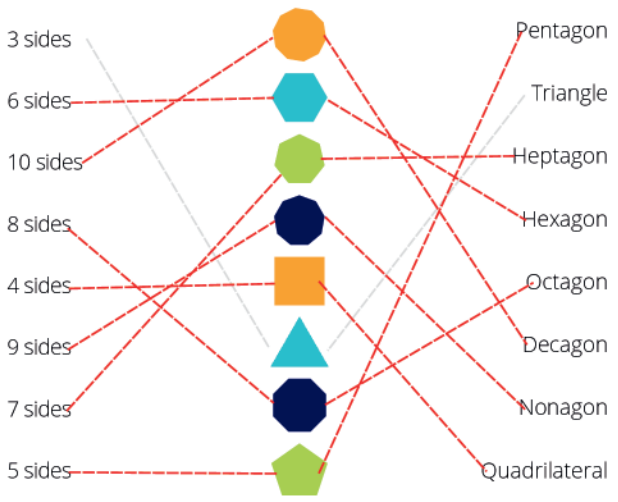
3 + 2 = 5	6 + 9 = 15	8 + 5 = 13
30 + 20 = 50	60 + 90 = 150	80 + 50 = 130
300 + 200 = 500	600 + 900 = 1500	800 + 500 = 1300

What time is shown on these clocks? Write the time on the digital clock below.



2:00 2:10 2:23 2:34 2:54

Draw lines to match the polygons across all three columns.

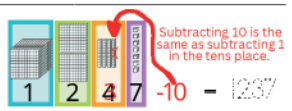


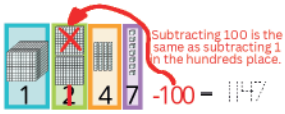
There are many types of quadrilaterals (shapes with FOUR sides). Draw lines to match each quadrilateral to it's most specific name.

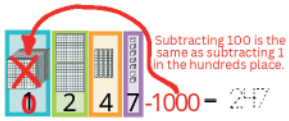
Geometry Riddle:

What's a polygon? A dead parrot.

Date _____



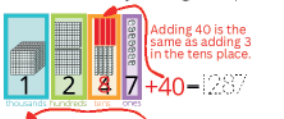




Find the SUMS and DIFFERENCES by adding or subtracting mentally.

23 + 10 = 33 (add 1 in the tens place)	777 - 100 = 677	111 - 100 = 11
75 - 1 = 74 (subtract 1)	1445 + 1000 = 2445	4045 - 1000 = 3045
401 + 100 = 501 (add 1 in the hundreds place)	134 - 10 = 124	1027 - 10 = 1017
234 + 100 = 334 (add 1 in the hundreds place)	241 + 1000 = 1241	2410 + 1000 = 3410
55 - 10 = 45 (subtract 1 in the tens place)	358 - 10 = 348	598 - 10 = 588
29 + 1 = 30 (add 1)	321 + 10 = 331	300 + 10 = 310
193 - 10 = 183 (subtract 1 in the tens place)	2755 - 100 = 2655	2550 - 1000 = 1550
275 + 100 = 375 (add 1 in the hundreds place)	825 + 1000 = 1825	3105 + 1000 = 4105
1303 + 1000 = 2303 (add 1 in the thousands place)	1545 + 1000 = 2545	1100 + 100 = 1200

Find the sums by adding multiples of ten in the correct column.

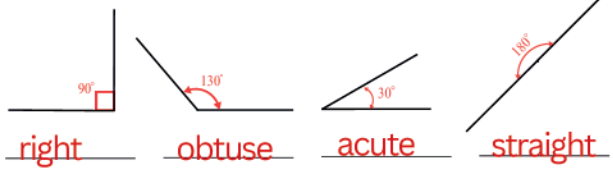


1342 + 200 =	1542 (add 2 in the hundreds place)
3104 + 30 =	3134 (add 3 in the tens place)
1505 + 50 =	1555 (add 5 in the tens place)
1342 + 500 =	1842 (add 5 in the hundreds place)
1272 + 400 =	1672 (add 4 in the hundreds place)
2113 + 2000 =	4113 (add 2 in the thousands place)
1004 + 300 =	1304 (add 3 in the hunreds place)

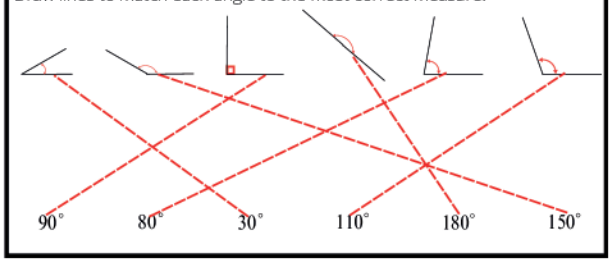
Draw a dot inside each angle. Count the numbers of angles in each shape.

1 angles | 0 angles | 3 angles | 5 angles | 4 angles

Write straight, right, acute or obtuse below each angle.



Draw lines to match each angle to the most correct measure.



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

98	99	100	101	102	103	104	105	106	107
108	109	110	111	112	113	114	115	116	117

Date _____

Word Problem Steps:

1. Read the problem carefully.
2. Circle the question.
3. Underline the important information.
4. Cross out any information that doesn't matter.
5. Draw a picture and write a number sentence. Solve the problem and show your work.
6. Check. Re-read your problem and check your work.

I took my six kids to the library, where they each borrowed five books. I borrowed ten books. How many books did we borrow altogether?

Draw a picture:

Number Sentence 1:

6 (number of kids) x 5 (books per kid) = 30 (kids books)

Number Sentence 2:

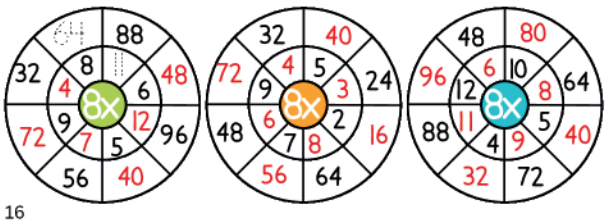
30 (kid's books) + 10 (mom's books) = 40 (total books)

You read three books last week. One book had 383 pages, one book had 516 pages and one book had 209 pages. How many pages did you read last week?

Number Sentence:

383 + 516 + 209 = 1108

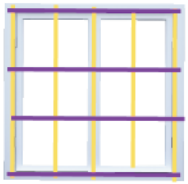
Fill in the blanks of these multiplication circles so that the outer circle is the PRODUCT of the middle circle and the innermost circle.



Color the coins needed to buy the sailboat.

Fill in each square with factors such that the product of each set of factors, horizontally and vertically, are correct.

8	6	48	8	8	64	8	3	24	8	2	16
9	5	45	2	3	6	10	7	70	1	5	5
72	30		16	24		80	21		8	10	
8	4	32	8	10	80	8	5	40	8	6	48
4	9	36	8	5	40	6	6	36	4	3	12
32	36		64	50		48	30		32	18	
8	7	56	8	2	16	8	9	72	8	8	64
3	7	21	7	4	28	3	2	6	6	9	54
24	49		56	8		24	18		48	72	



Use a ruler to measure the length and width of this window in inches. Remember to write the units! Trace all horizontal lines purple.

- Trace all horizontal lines purple.
- Trace all vertical lines yellow.
- Trace all oblique lines green.
- Draw a red line of symmetry. answers will vary
- What would be the measurements of a congruent shape? 2" x 2"

Date _____

Each box holds a HALF DOZEN donuts. How many donuts do you have?

Write a number sentence as repeated addition, then as multiplication.

6 + 6 + 6 + 6 = 24 ← repeated addition

4 (number of boxes) x 6 (donuts per box) = 24 ← multiplication

Each bag has TEN jelly beans. How many jelly beans do you have?

10 + 10 + 10 + 10 + 10 + 10 + 10 + 10 = 80 ← repeated addition

10 (number of bags) x 8 (jelly beans per bag) = 80 ← multiplication

Each watermelon slice has FIVE seeds. How many seeds are there?

5 + 5 + 5 + 5 + 5 + 5 + 5 + 5 + 5 + 5 = 50 ← repeated addition

5 (number of slices) x 10 (seeds per slice) = 50 ← multiplication

Each bunch has THREE bananas. How many bananas do you have?

3 + 3 + 3 + 3 + 3 + 3 = 18 ← repeated addition

6 (number of bunches) x 3 (bananas per bunch) = 18 ← multiplication

Find the products.

8 x 8 = 64	7 x 6 = 42	
8 x 6 = 48	7 x 12 = 84	
8 x 1 = 8	7 x 1 = 7	
8 x 5 = 40	7 x 5 = 35	
8 x 7 = 56	7 x 11 = 77	
8 x 2 = 16	7 x 4 = 28	
8 x 11 = 88	7 x 7 = 49	
8 x 10 = 80	7 x 1 = 7	
8 x 4 = 32	7 x 3 = 21	
8 x 12 = 96	7 x 8 = 56	
8 x 3 = 24	7 x 9 = 63	
8 x 9 = 72	7 x 10 = 70	

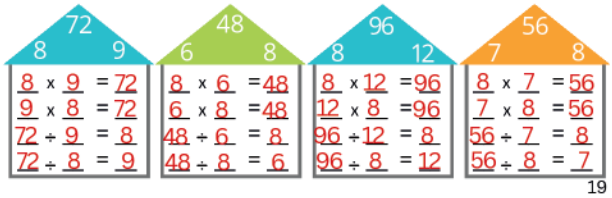
Find the quotients.

49÷7 = 7
64÷8 = 8
84÷7 = 12
72÷8 = 9
42÷7 = 6
56÷7 = 8
88÷8 = 11
48÷8 = 6
63÷7 = 9
28÷7 = 4
56÷8 = 7
96÷8 = 12

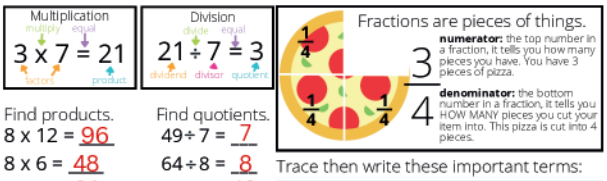
Trace the existing numbers, fill in the missing numbers and color the squares with EVEN numbers yellow.

495	496	497	498	499	500	501	502	503	504
505	506	507	508	509	510	511	512	513	514

Complete these Fact Family houses.



Date _____



Find products.

8 x 12 = 96
8 x 6 = 48
8 x 8 = 64
8 x 5 = 40
8 x 7 = 56
8 x 2 = 16
8 x 11 = 88
8 x 9 = 72
8 x 4 = 32
8 x 3 = 24

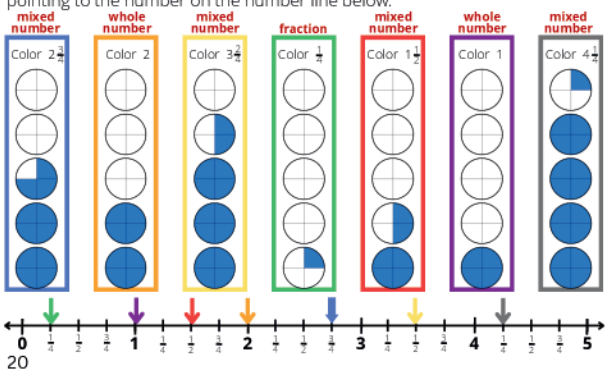
Find quotients.

49÷7 = 7
64÷8 = 8
84÷7 = 12
72÷8 = 9
42÷7 = 6
56÷7 = 8
88÷8 = 11
48÷8 = 6
63÷7 = 9
56÷8 = 7

Trace then write these important terms:

product
quotient
numerator
denominator
whole number
mixed number

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



I bought a pizza each night for a week. Each pizza was cut into eight pieces. I ate them all. How many pieces of pizza did I eat?

Write a number sentence.

7 x 8 = 56

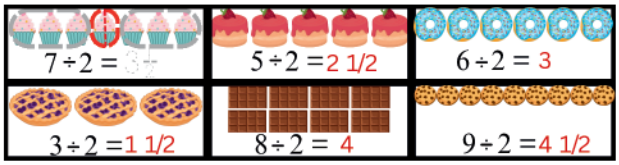
Your three cats each had FIVE kittens! Oh, my goodness! How many kittens are there?

Draw a picture:

Write a number sentence.

3 x 5 = 15

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.



Do you see a pattern? Look at the boxes above with an EVEN dividend (6 and 8). Now look at the boxes with an ODD dividend (7, 5, 3 and 9). What's the pattern?

odd leaves a remainder

Jumbled up Greek prefix	Greek Prefix	Number of sides
treat	tetra	four
anon	nona	nine
heax	hexa	six
theap	hepta	seven
edca	deca	ten
coat	octa	eight
tenap	penta	five

Use these words to label the diagrams below:

factors, product, quotient, dividend, divisor, multiply, divide, equal

Multiplication

3 x 7 = 21

Division

21 ÷ 7 = 3

Date _____

13 x 1 =
13 x 10 =
13 x 100 =
13 x 1000 =

15 x 1 = 15
15 x 10 = 150
15 x 100 = 1500
15 x 1000 = 15000

27 x 1 =
27 x 10 = 270
27 x 100 = 2700
27 x 1000 = 27000

19 x 1 = 19
19 x 10 = 190
19 x 100 = 1900
19 x 1000 = 19000

Find the differences by regrouping.

564 − 205 = 359

786 − 149 = 637

600 − 112 = 488

24 − 17 = 07
35 − 28 = 07
40 − 39 = 01
57 − 56 = 01
30 − 15 = 15
22 − 9 = 13
34 − 26 = 08
21 − 16 = 05
56 − 37 = 19
84 − 45 = 39
45 − 22 = 23
71 − 36 = 35

How much time has elapsed between each set of clocks?

10 minutes
55 minutes
30 minutes
4 hours

10 minutes earlier	5 minutes earlier	current time	5 minutes later	10 minutes later
9:05	9:10	9:15	9:20	9:25
10:20	10:25	10:30	10:35	10:40

How much time has elapsed?

1 hour and 35 minutes

2 hours and 40 minutes

1 hour and 15 minutes

1 hour and 50 minutes

Date _____

Compare these fractions by drawing the correct comparison symbol (<, >, =) between them. Use your FRACTION BARS or FRACTION CIRCLES to help.

$\frac{1}{2} > \frac{1}{4}$ $\frac{1}{8} < \frac{1}{5}$ $\frac{1}{2} < \frac{3}{4}$

$\frac{1}{3} > \frac{1}{5}$ $\frac{1}{6} > \frac{1}{8}$ $\frac{2}{6} < \frac{2}{3}$

Color pieces of each bottom shape so it matches the top shape. Then write each equivalent fractions number sentence.

$\frac{1}{3} = \frac{2}{6}$ $\frac{1}{2} = \frac{3}{6}$ $\frac{2}{5} = \frac{4}{10}$ $\frac{1}{4} = \frac{3}{12}$

$\frac{2}{3} = \frac{4}{6}$ $\frac{6}{8} = \frac{3}{4}$ $\frac{8}{10} = \frac{4}{5}$ $\frac{2}{2} = \frac{12}{12}$

Draw lines to match:

product
quotient
numerator
denominator
whole number
mixed number

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

Here's the challenge from today's video:

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

fraction fraction whole number

Fill in each square with factors such that the product of each set of factors, horizontally and vertically, are correct.

8 6 48 5 9 45 40 54	8 9 72 6 8 48 48 72	8 5 40 7 6 42 56 30
8 9 72 10 8 80 80 72	8 8 64 11 7 77 88 56	8 4 32 6 4 24 48 16

Color each rectangle according to the product of the numbers inside:

0-25 | 26-50 | 51-75 | 76-100 | 100+

8 x 4	4 x 7	5 x 6	5 x 8	7 x 5	8 x 9	7 x 9	5 x 10	4 x 11
3 x 12	7 x 5	11 x 3	6 x 6	6 x 9	7 x 8	8 x 8	7 x 7	6 x 8
8 x 6	6 x 7	12 x 3	12 x 7	9 x 9	7 x 7	5 x 12	12 x 6	12 x 8
7 x 6	12 x 3	12 x 6	8 x 10	9 x 9	8 x 12	10 x 10	9 x 9	11 x 8
6 x 5	7 x 12	9 x 10	10 x 10	9 x 9	10 x 10	9 x 9	12 x 7	9 x 4
4 x 12	9 x 11	9 x 11	9 x 9	9 x 10	9 x 9	9 x 11	8 x 12	4 x 8
4 x 7	9 x 9	10 x 8	7 x 12	11 x 9	8 x 10	10 x 9	8 x 11	6 x 6
8 x 4	8 x 12	12 x 8	9 x 11	10 x 8	9 x 10	9 x 11	9 x 9	8 x 4
5 x 8	9 x 11	11 x 9	9 x 10	12 x 7	8 x 11	10 x 9	10 x 12	10 x 11
10 x 4	9 x 9	8 x 12	7 x 12	9 x 9	12 x 12	11 x11	8 x 11	11 x 3
8 x 6	8 x 6	12 x 7	8 x 10	7 x 12	9 x10	10 x 8	12 x 8	8 x 5
11 x 4	6 x 8	6 x 8	12 x 8	8 x 10	8 x 12	10 x 10	11 x 4	6 x 8	7 x 6

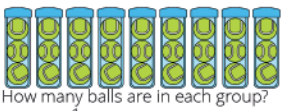
Date _____

Divide these stars into 4 groups.

How many stars are in each group?

What is $\frac{1}{4}$ of 24? 6

Divide these balls into 3 groups.



How many balls are in each group?

What is $\frac{1}{3}$ of 27? 9

Divide these apples into 2 groups.

What is $\frac{1}{2}$ of 24? 12

Divide these dots into 6 groups.

What is $\frac{1}{6}$ of 48? 8

Find the products.

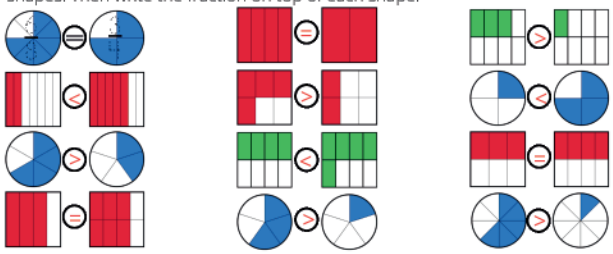
8 x 4 = 32
8 x 9 = 72
8 x 1 = 8
8 x 6 = 48
8 x 7 = 56
8 x 12 = 96
8 x 5 = 40
8 x 8 = 64
8 x 3 = 24
8 x 10 = 80
8 x 11 = 88
8 x 2 = 16

7 x 6 = 42
7 x 12 = 84
7 x 8 = 56
7 x 5 = 35
7 x 2 = 14
7 x 11 = 77
7 x 4 = 28
7 x 10 = 70
7 x 3 = 21
7 x 1 = 7
7 x 9 = 63
7 x 7 = 49

Find the quotients.

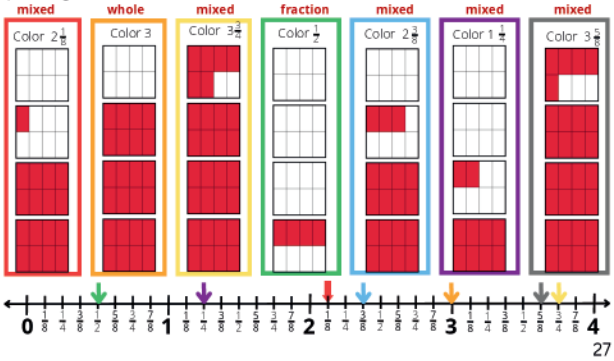
48÷8 = 6
63÷7 = 9
16÷8 = 2
64÷8 = 8
56÷8 = 7
32÷8 = 4
56÷7 = 8
49÷7 = 7
24÷8 = 3
96÷8 = 12
72÷8 = 9
40÷8 = 5

Place the correct comparison symbol (<, >, =) in the circle between each set of shapes. Then write the fraction on top of each shape.



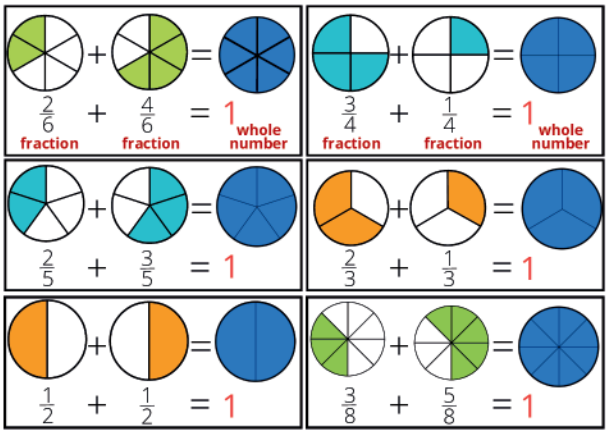
Color the coins needed to buy the robot.

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



Date _____

Add the fractions and color the sections of the empty circle to find the SUM.



$\frac{2}{6}$ + $\frac{4}{6}$ = 1 (fraction + fraction = whole number)

$\frac{3}{4}$ + $\frac{1}{4}$ = 1 (fraction + fraction = whole number)

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

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

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

$\frac{3}{8}$ + $\frac{5}{8}$ = 1

one less	one more	ten less	ten more	100 less	100 more
24, 25, 26		39, 49, 59		3, 103, 203	
50, 51, 52		5, 15, 25		757, 857, 957	
32, 33, 34		18, 28, 38		176, 276, 376	
16, 17, 18		47, 57, 67		215, 315, 415	

27 x 1 =
27 x 10 =
27 x 100 =
27 x 1000 =

19 x 1 =
19 x 10 =
19 x 100 =
19 x 1000 =

Fill in the missing factors to complete each number sentence.

8 x 5 = 40	3 x 7 = 21	9 x 8 = 72
8 x 3 = 24	5 x 9 = 45	12 x 6 = 72
7 x 7 = 49	8 x 7 = 56	6 x 8 = 48
4 x 4 = 16	4 x 5 = 20	5 x 5 = 25
9 x 4 = 36	4 x 8 = 32	5 x 6 = 30
3 x 7 = 21	12 x 8 = 96	6 x 4 = 24
5 x 3 = 15	7 x 9 = 63	12 x 3 = 36

Can you solve these multiplication puzzles?

2	x	4	=	8
x		x		x
3	x	3	=	9
=		=		=
6	x	12	=	72

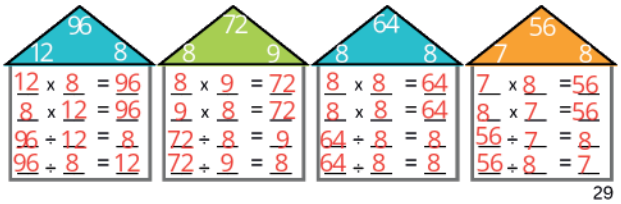
1	x	5	=	5
x		x		x
4	x	1	=	4
=		=		=
4	x	5	=	20

1	x	4	=	4
x		x		x
2	x	6	=	12
=		=		=
2	x	24	=	48

Put these numbers in order from smallest to largest.

21 41 12 27 45	12 (smallest)	21	27	41	45 (largest)
315 351 311 113 305	113 (smallest)	305	311	315	351 (largest)

Complete these Fact Family houses.



Date _____

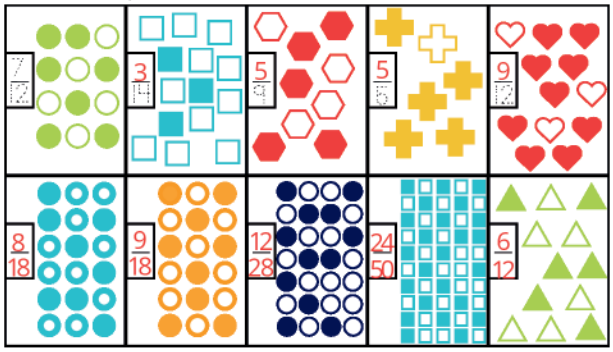
Trace then write each word.

whole number

mixed number

fraction

What fractional part is colored?



Multiply the number by each of the numbers in the center circle. Write the products in the outer circle.

Capacity Measurement:

How many cups fit in one quart? 4 — How many pints fit in one quart? 2

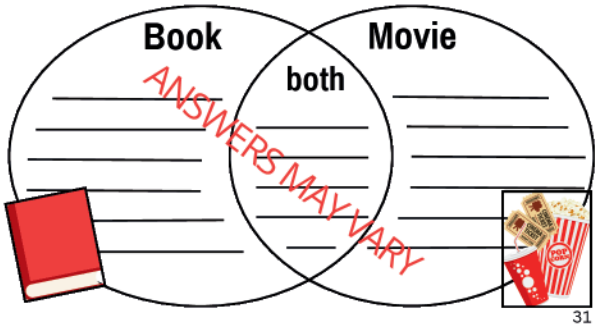
How many quarts fit in one gallon? 4 — How many cups fit in one gallon? 16

How many pints fit in one gallon? 8 — How many pints fit in two gallons? 16

Write the correct comparison symbol (<, >, =) between each set of capacity measurements. Remember the shark always wants to eat the LARGER amount.

Let's make a VENN DIAGRAM.

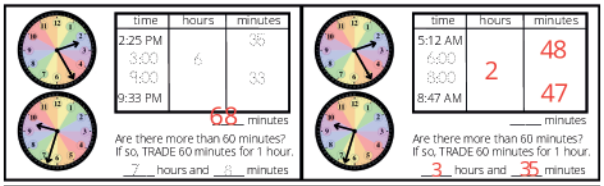
Think of your favorite book that has been made into a movie. Write down as many things as you can think of that the book and movie have in common, then write lists for just the book or movie that they don't share.



Date _____

30 minutes earlier	15 minutes earlier	current time	15 minutes later	30 minutes later
5:00	5:15	5:30	5:45	6:00
2:45	3:00	3:15	3:30	3:45
12:50	1:05	1:20	1:35	1:50
8:30	8:45	9:00	9:15	9:30

How much time has elapsed?



time	hours	minutes
2:25 PM	6	35
3:00		
9:00		33
9:33 PM		

68 minutes

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

7 hours and 8 minutes

time	hours	minutes
5:12 AM	2	48
6:00		
8:00		47
8:47 AM		

____ minutes

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

3 hours and 35 minutes

How long is your flight?

time	hours	minutes
8:20 AM	4	40
9:00 AM		
12:00 PM		
4:00 PM		45
4:45 PM		

85 minutes

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

1 hours and 25 minutes

How long is your movie?

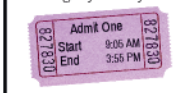
time	hours	minutes
10:10 AM	2	50
11		
1		15
1:15 PM		

65 minutes

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

1 hours and 5 minutes

How long is your day camp?



time	hours	minutes
9:05 AM	5	55
10		
3		55
3:55 PM		

110 minutes

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

1 hours and 50 minutes

Find products.	Find quotients.	Find products.	Find quotients.
6 x 12 = 72	36÷6 = 6	8 x 12 = 96	64÷8 = 8
6 x 3 = 18	72÷6 = 12	7 x 12 = 84	72÷8 = 9
6 x 8 = 48	66÷6 = 11	8 x 8 = 64	63÷7 = 9
6 x 5 = 30	24÷6 = 4	7 x 5 = 35	84÷7 = 12
6 x 6 = 36	42÷6 = 7	8 x 6 = 48	56÷8 = 7
6 x 2 = 12	54÷6 = 9	7 x 8 = 56	96÷8 = 12
6 x 11 = 66	18÷6 = 3	8 x 11 = 88	56÷7 = 8
6 x 9 = 54	48÷6 = 8	7 x 9 = 63	48÷8 = 6
6 x 4 = 24	30÷6 = 5	8 x 9 = 72	49÷7 = 7
6 x 7 = 42	12÷6 = 2	7 x 7 = 49	40÷8 = 5

Draw hands on each clock to show:

Quarter Before	Current Time	Quarter After	Half Past
			
			

1428 (thousands, hundreds, tens, ones)

Round to the nearest TEN: 1430
Round to the nearest HUNDRED: 1400
Round to the nearest THOUSAND: 1000

2560 (thousands, hundreds, tens, ones)

Round to the nearest TEN: 2560
Round to the nearest HUNDRED: 2600
Round to the nearest THOUSAND: 3000

1831 (thousands, hundreds, tens, ones)

Round to the nearest TEN: 1830
Round to the nearest HUNDRED: 1800
Round to the nearest THOUSAND: 2000

2114 (thousands, hundreds, tens, ones)

Round to the nearest TEN: 2110
Round to the nearest HUNDRED: 2100
Round to the nearest THOUSAND: 2000

Date _____

Find the price of each meal. How much change will I get if I pay with $10.00?

FUN FOOD MENU

Hamburger	$3.20
Hot dog	$1.50
Pizza	$2.80
French Fries	$1.65
Salad	$1.25
Apple Slices	$1.88
Soda	$1.19
Ice cream	$2.79

Hamburger 3.20
French Fries 1.65
Soda + 1.19
total $ 6.04
$10.00 - 6.04
total change $ 3.96

Pizza 2.80
Soda + 1.19
total $ 3.99
$10.00 - 3.99
total change $ 6.01

Hot dog 1.50
Salad 1.25
Ice Cream + 2.79
total $ 5.54
$10.00 - 5.54
total change $ 4.46

Order these numbers from smallest to largest.

101 113 110 131 311	101 (smallest)	110	113	131	311 (largest)
189 118 198 181 108	108 (smallest)	118	181	189	198 (largest)
121 112 120 123 127	112 (smallest)	120	121	123	127 (largest)
401 104 114 410 411	104 (smallest)	114	401	410	411 (largest)
678 768 867 786 687	678 (smallest)	687	768	786	867 (largest)

one less	one more	ten less	ten more	100 less	100 more
415, 416, 417		406, 416, 426		316, 416, 516	
100, 101, 102		91, 101, 111		1, 101, 201	
236, 237, 238		227, 237, 247		137, 237, 337	
311, 312, 313		302, 312, 322		212, 312, 412	

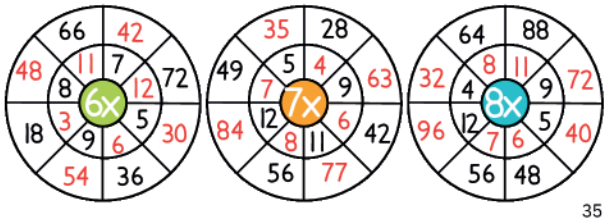
How much money is this?

$ 7 . 32 dollars cents
$ 3 . 03 dollars cents
$ 3 . 23 dollars cents
$ 10 . 66 dollars cents
$ 3 . 33 dollars cents

Complete these Fact Family houses.

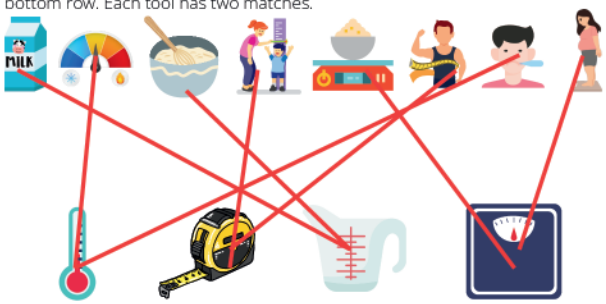
48 (6, 8)	42 (6, 7)	54 (9, 6)	72 (12, 6)	66 (6, 11)
6 x 8 = 48	6 x 7 = 42	9 x 6 = 54	12 x 6 = 72	6 x 11 = 66
8 x 6 = 48	7 x 6 = 42	6 x 9 = 54	6 x 12 = 72	11 x 6 = 66
48 ÷ 8 = 6	42 ÷ 7 = 6	54 ÷ 6 = 9	72 ÷ 6 = 12	66 ÷ 11 = 6
48 ÷ 6 = 8	42 ÷ 6 = 7	54 ÷ 9 = 6	72 ÷ 12 = 6	66 ÷ 6 = 11

Fill in the blanks of these multiplication circles so that the outer circle is the PRODUCT of the middle circle and the innermost circle.



Date _____

Draw lines to match each picture in the top row with the correct tool in the bottom row. Each tool has two matches.

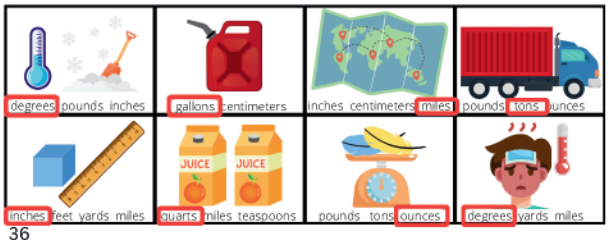


1 yard = 3 feet
1 foot = 12 inches

Convert these US Customary units of length.

1 yard = 3 feet	1 yard = 36 inches	36 inches = 3 feet
2 yards = 6 feet	12 inches = 1 foot	36 inches = 1 yard
9 feet = 3 yards	15 feet = 180 inches	12 feet = 4 yards
4 feet = 48 inches	15 feet = 5 yards	2 yards = 72 inches

Which unit of measurement should we use? Circle the correct unit.



Fill in each square with factors such that the product of each set of factors, horizontally and vertically, are correct.

6	5	30
7	6	42
42	30	

6	4	24
6	4	24
36	16	

6	9	54
3	8	24
18	72	

6	5	30
7	9	63
42	45	

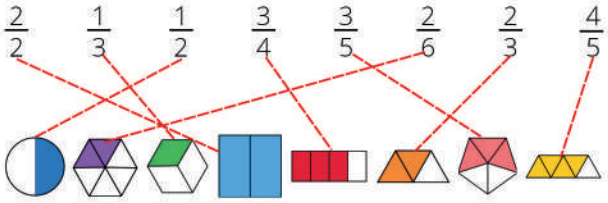
6	6	36
5	9	45
30	54	

6	8	48
11	7	77
66	56	

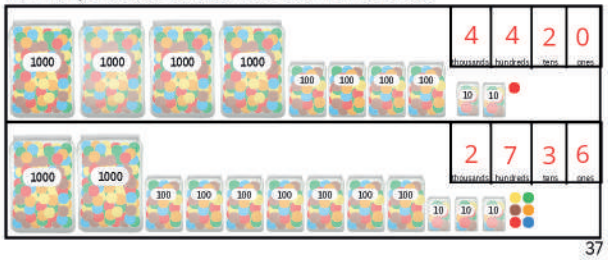
6	4	24
6	7	42
36	28	

6	2	12
8	9	72
48	18	

Draw lines to match the fractions.

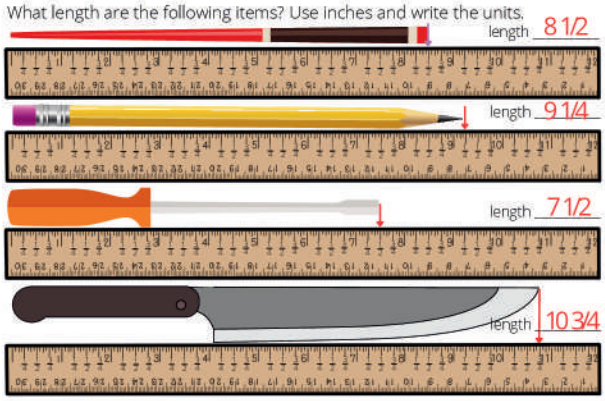


How many chocolate candies? Read each number aloud.

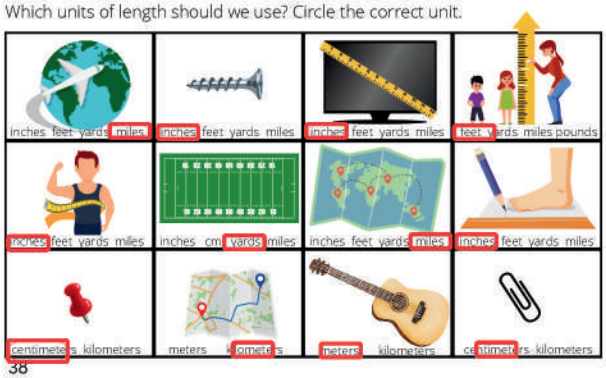


Date _____

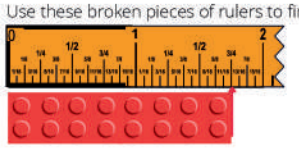
What length are the following items? Use inches and write the units.



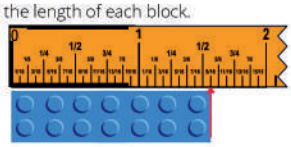
Which units of length should we use? Circle the correct unit.



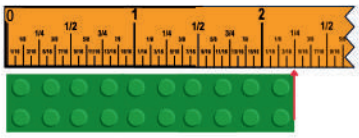
Use these broken pieces of rulers to find the length of each block.



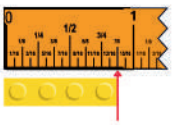
length 1 3/4 inches



length 1 9/16 inches

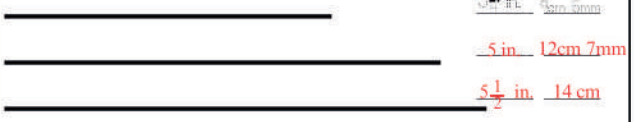


length 2 1/4 inches



length 7/8 inch

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



Fill in each square with factors such that the product of each set of factors, horizontally and vertically, are correct.

4	5	20
7	6	42
28	30	

4	3	12
6	2	12
24	6	

4	9	36
3	8	24
12	72	

4	8	32
5	9	45
20	72	

4	6	24
5	8	40
20	48	

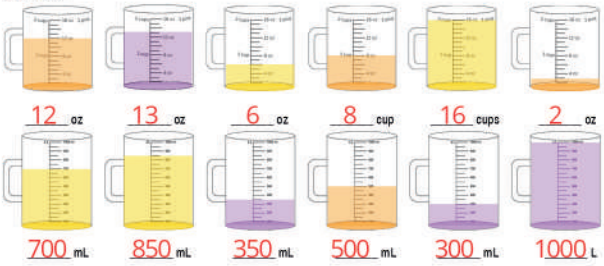
4	11	44
8	7	56
32	77	

4	7	28
4	6	24
16	42	

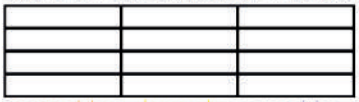
4	8	32
9	2	18
36	16	

Date _____

How much juice is in each measuring container? (oz is the abbreviation for ounces)



Graph the amounts of juice above in the columns below.



Is this hard? Why?

You don't really have to graph the amounts. I just wanted you to think about WHY it is difficult to graph amounts in different units of measurement on the same graph.

Convert these US Customary Units.

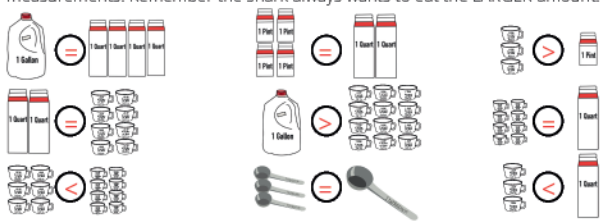
1 gallon = 4 quarts
1 quart = 4 cups
1 gallon = 16 cups
2 gallons = 32 cups
20 cups = 5 quarts

1 cup = 8 ounces
3 cups = 24 ounces
1 quart = 32 ounces
128 ounces = 1 gallon
2 ounces = 1 Tablespoon

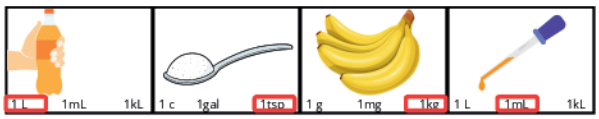
18 cups = 1 gallon 1 pint
6 cups = 1 quart 1 pint
2 gallons = 8 quarts
40 ounces = 1 quart 1 cup

1 gallon 4 cups = 5 quarts
16 ounces = 2 cups
16 Tablespoons = 32 ounces
52 cups = 3 gallons 1 quart

Write the correct comparison symbol (<, >, =) between each set of capacity measurements. Remember the shark always wants to eat the LARGER amount.



Circle the best estimate of the capacity of each item.



Convert these **US Customary** length units.

14 feet = 4 yards 2 feet

15 inches = 1 foot 3 inches

29 feet = 9 yards 2 feet

5 feet = 1 yard 24 inches

1 mile = 5280 feet

20 feet = 6 yards 2 feet

35 inches = 2 feet 11 inches

4 feet = 1 yard 12 inches

Convert these **metric** length units.

70 cm = 700 mm

90 mm = 9 cm

1000 cm = 10 m

1000 mm = 1 m

10 mm = 1 cm

40 mm = 4 cm

500 cm = 5 m

10 m = 1000 cm

59 m = 5900 cm

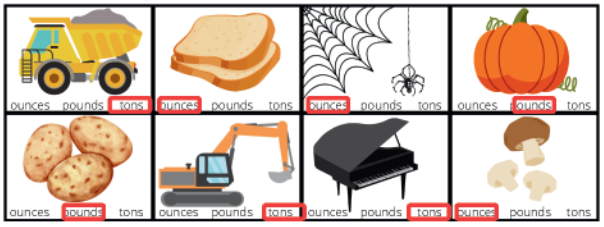
800 mm = 80 cm

61m = 6100 cm

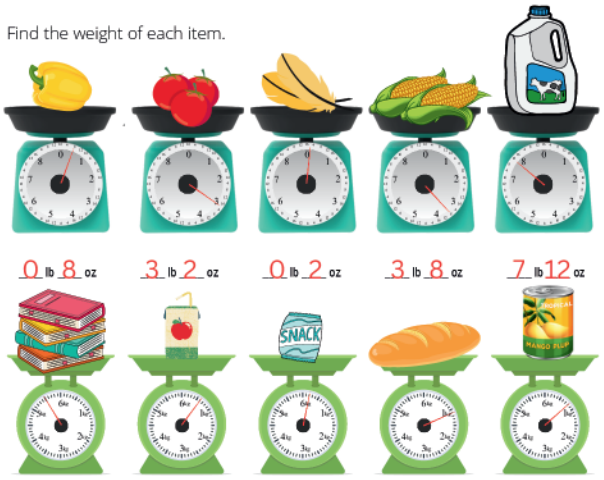
9000 mm = 900 cm

Date _____

Which units of weight should we use? Circle the correct unit.



Find the weight of each item.



0 lb 8 oz | 3 lb 2 oz | 0 lb 2 oz | 3 lb 8 oz | 7 lb 12 oz

5 kg 500 g | 0 kg 600 g | 0 kg 200 g | 1 kg 100 g | 0 kg 800 g

1 pound (lb) = 16 ounces (oz)
1 ton = 2000 lb

Convert **US Customary** weight units.

1 lb = 16 oz

2 lbs = 32 oz

1 ton = 2000 lbs

35 oz = 2 lb 3 oz

50 oz = 4 lb 2 oz

1 kilogram (kg) = 1000 grams (g)
1 g = 1000 mg

Convert **metric** weight units.

1 kg = 1000 g

20 kg = 20000 g

3500 g = 3 kg 500 g

4000 mg = 4 g

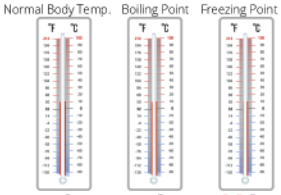
5100 g = 5 kg 100 g

Measurement word problems. Draw a picture then write a number sentence to solve the problem.

A wood board is 4 feet long. We need to cut it into 6 equal pieces. How long will each piece be? 4 feet = 48 inches 48 (number of inches) ÷ 6 (number of pieces) = 8 (length of each piece)	You have one quart of orange juice. If you pour an equal amount into 4 glasses, how many ounces will each glass hold? 1 quart = 32 ounces 32 (number of ounces) ÷ 4 (number of glasses) = 8 (amount in each glass)
Your water bottle holds 9 liters. It's half full. how much water do you have? 9 L = 9000 mL 9000 (amount of water in mL) ÷ 2 = 5000 (amount in bottle)	You gathered eggs from your chickens. The biggest egg is 54 grams and the smallest egg is 37 grams. How much bigger is the biggest egg? 17 grams
You got up at 8:10, which is 40 minutes later than usual. What time do you usually get up? 7:30	You started math at 9:15 am and it took you 45 minutes to complete. Then you read a book for 30 minutes and studied science for 20 minutes. What time did you finish? 10:50

Date _____

Use a red crayon to show the freezing point and the boiling point of water as well as normal body temperature. These were given in today's video. Write the temperatures in both scales on the lines below the thermometers.



Normal body temperature: 37 °C

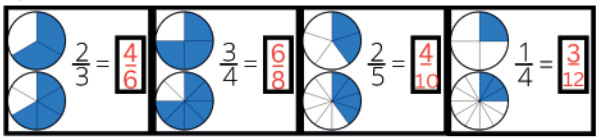
Freezing point of water: 0 °C

Boiling point of water: 100 °C

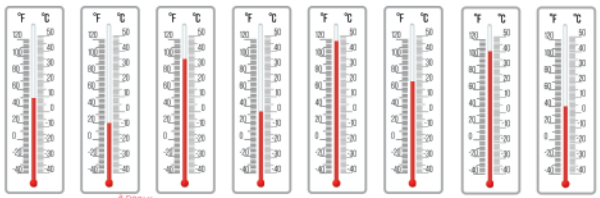
98.6 °F | 212 °F | 32 °F

37 °C | 100 °C | 0 °C

Color pieces of each bottom shape so it matches the top shape. Then write each equivalent fractions number sentence.



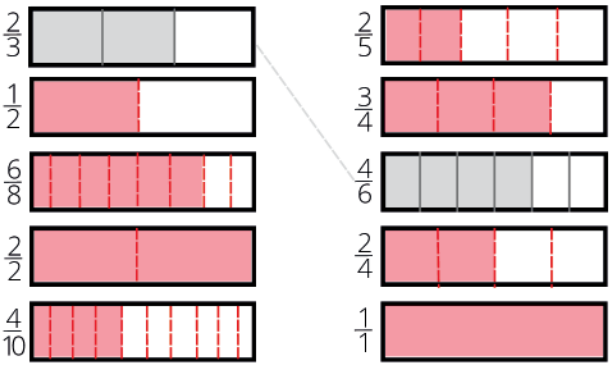
Write each temperature using both degrees fahrenheit and celsius. Circle any temperatures you recognize as important.



50 °F | 20 °F (a negative temperature?) | 96 °F | 32 °F | 118 °F | 70 °F | 108 °F | 40 °F

10 °C | -7 °C | 35 °C | 0 °C | 46 °C | 20 °C | 40 °C | 4 °C

Draw lines to partition each bar into the number specified by the denominator and shade each bar to match the numerator of the fraction in front of it. Then draw lines to match the equivalent fractions in both of the columns. Your partitions don't have to be perfect!



Find the products. What is the significance of the colored problems?

8 x 5 = 40	7 x 7 = 49	6 x 12 = 72	4 x 2 = 8
8 x 12 = 96	7 x 11 = 77	6 x 11 = 66	4 x 6 = 24
8 x 6 = 48	7 x 8 = 56	6 x 8 = 48	4 x 4 = 16
8 x 3 = 24	7 x 9 = 63	6 x 4 = 24	4 x 11 = 44
8 x 11 = 88	7 x 3 = 21	6 x 2 = 12	4 x 1 = 4
8 x 7 = 56	7 x 4 = 28	6 x 7 = 42	4 x 3 = 12
8 x 1 = 8	7 x 2 = 14	6 x 10 = 60	4 x 8 = 32
8 x 9 = 72	7 x 12 = 84	6 x 5 = 30	4 x 5 = 20
8 x 2 = 16	7 x 6 = 42	6 x 1 = 6	4 x 10 = 40
8 x 10 = 80	7 x 1 = 7	6 x 3 = 18	4 x 12 = 48
8 x 8 = 64	7 x 5 = 35	6 x 9 = 54	4 x 7 = 28
8 x 4 = 32	7 x 10 = 70	6 x 6 = 36	4 x 9 = 36

Date _____

Draw lines to match each data set to the best type of graph.

PICTOGRAPH | VENN DIAGRAM | LINE GRAPH | BAR GRAPH | PIE CHART

A type of bar graph, pictographs are pictorial representations of data using images, icons, or symbols.

Visual organizer of overlapping circles that explores the relationship between a set of different things.

Represents continuous data using lines to connect individual data points.

Makes it easy to compare DISCRETE data between different groups, using bars.

Represents data as a circle. The slices of pie show the size of the data relative to each other.

Graph your growth over the year.

Graph the hair colors of everyone in your neighborhood.

Use pictures to represent your friend's favorite pets.

Your family is one whole group. Graph your family members favorite ice cream flavors as a percentage of the whole.

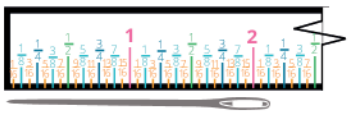
Compare the similarities and differences of dogs and cats.

Fill in the missing numbers.

98	99	100	101	102	103	104	105	106	107

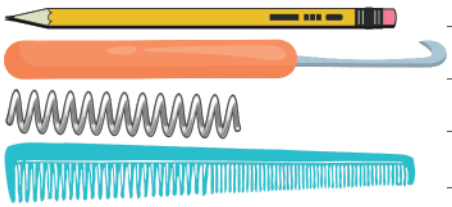
Find the missing member of each FACT FAMILY.

How long is this sewing needle?



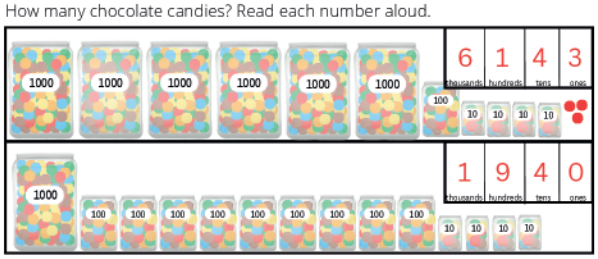
$2\frac{1}{8}$ in

Use a ruler to measure each item in Customary and Metric units.



___ cm	___ in
13 cm	$5\frac{1}{8}$ in
7 cm	$2\frac{3}{4}$ in
12 cm	$4\frac{3}{4}$ in

How many chocolate candies? Read each number aloud.

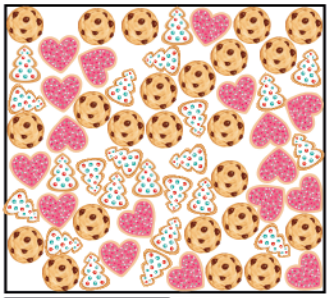


Convert these length units.

16 ft = 5 yd 1 ft	12 km = 12000 m	3 cm = 30 mm
14 in = 1 ft 2 in	3000 mm = 3 m	900 mm = 90 cm
25 ft = 8 yd 1 ft	2 m = 200 cm	6 m = 6000 mm
1 mi = 5280 ft	37 m = 3700 cm	100 mm = 10 cm

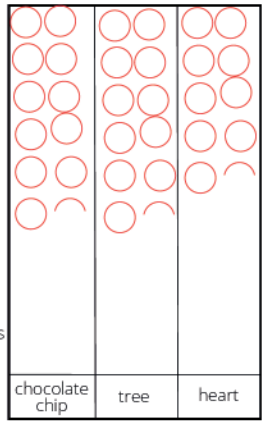
Date _____

Build a FREQUENCY TABLE and then a PICTOGRAPH.



	23
	23
	17

KEY
Each circle represents two cookies.



Find products.

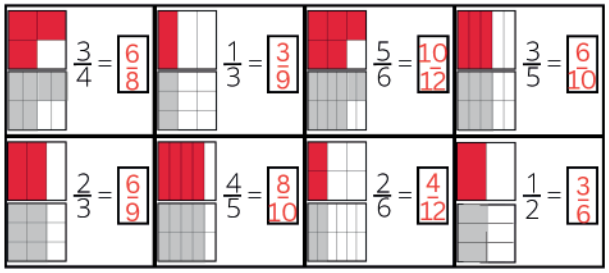
4 x 3 = 12	6 x 2 = 12
4 x 7 = 28	6 x 1 = 6
4 x 4 = 16	6 x 8 = 48
4 x 11 = 44	6 x 4 = 24
4 x 2 = 8	6 x 12 = 72
4 x 12 = 48	6 x 7 = 42
4 x 8 = 32	6 x 10 = 60
4 x 5 = 20	6 x 9 = 54
4 x 10 = 40	6 x 11 = 66
4 x 1 = 4	6 x 3 = 18
4 x 6 = 24	6 x 5 = 30
4 x 9 = 36	6 x 6 = 36

Find quotients.

36 ÷ 4 = 9
24 ÷ 4 = 6
16 ÷ 4 = 4
44 ÷ 4 = 11
20 ÷ 4 = 5
32 ÷ 4 = 8
12 ÷ 4 = 3
48 ÷ 4 = 12
28 ÷ 4 = 7
8 ÷ 4 = 2
40 ÷ 4 = 10

one less	one more	ten less	ten more	100 less	100 more
10, 11, 12		3, 13, 23		618, 719, 819	
18, 19, 20		45, 55, 65		1, 101, 201	
71, 72, 73		19, 29, 39		144, 244, 344	

Color pieces of each bottom shape so it matches the top shape. Then write each equivalent fractions number sentence.



Draw the correct comparison symbol (<, >, =) between each set of fractions below. Use your FRACTION BARS or FRACTION CIRCLES to help.

$\frac{2}{2} = \frac{3}{4}$ $\quad \frac{2}{8} > \frac{2}{9}$ $\quad \frac{1}{3} = \frac{3}{9}$

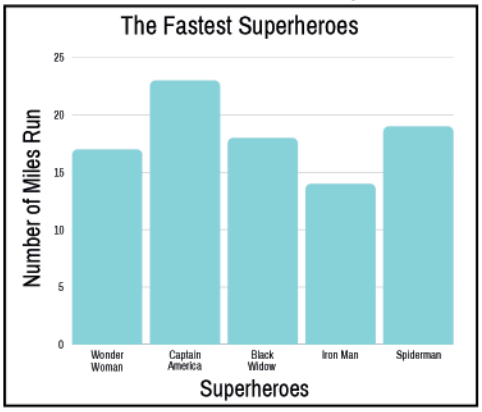
$\frac{2}{3} = \frac{4}{6}$ $\quad \frac{5}{6} > \frac{5}{8}$ $\quad \frac{1}{1} = \frac{7}{7}$

Convert these capacity units.

1 c = 8 oz	1 Tbsp = 3 tsp	9 qt = 2 gal 2 pt
1 qt = 4 c	1 gal = 8 pt	16 oz = 2 c
1 qt = 32 oz	1 gal = 4 qt	10 pt = 1 gal 4 c
16 c = 1 gal	9 tsp = 3 Tbsp	16 Tbsp = 12 oz
2 oz = 4 Tbsp	1 c = 16 Tbsp	20 Tbsp = 1 c 2 oz

Date _____

The superheroes had a race. The graph below shows how many miles each superhero ran in one hour. How many miles did each superhero run?



Wonder Woman: 17mi.
Captain America: 23 mi.
Black Widow: 18 mi.
Iron Man: 14 mi.
Spiderman: 19 mi.

Which superhero ran the most miles? Captain America

Who ran the least? Iron Man

How many MORE miles did Spiderman run than Iron Man? 5 mi.

How many miles did all of the superheroes run together? 91 mi.

How many MORE miles did Captain America run than Spiderman? 4 mi.

Find the sums.

1 + 2 = 3	4 + 5 = 9	8 + 7 = 15
10 + 20 = 30	40 + 50 = 90	80 + 70 = 150
100 + 200 = 300	400 + 500 = 900	800 + 700 = 1500

15 x 1 =
15 x 10 =
15 x 100 =
15 x 1000 =

ten thousands	thousands	hundreds	tens	ones
			1	5
		1	5	0
	1	5	0	0
1	5	0	0	0

99 x 1 =
99 x 10 =
99 x 100 =
99 x 1000 =

ten thousands	thousands	hundreds	tens	ones
			9	9
		9	9	0
	9	9	0	0
9	9	0	0	0

Color the coins needed to buy the football.

Color the coins needed to buy the cap.

Divide these hearts into 4 groups.

How many stars are in each group?
What is $\frac{1}{4}$ of 20? 5

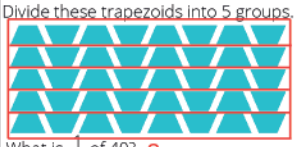
Divide these balls into 2 groups.

How many balls are in each group?
What is $\frac{1}{2}$ of 22? 11

Divide these oranges into 3 groups.

What is $\frac{1}{3}$ of 24? 8

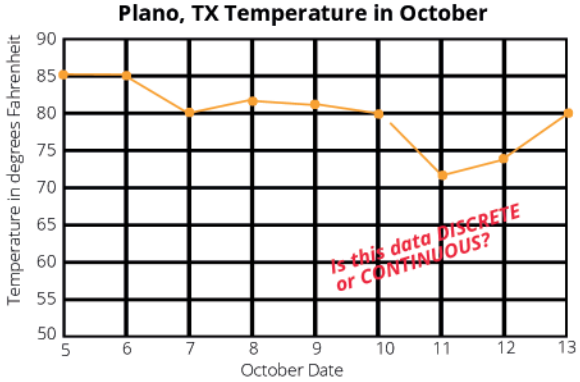
Divide these trapezoids into 5 groups.



What is $\frac{1}{5}$ of 40? 8

Date _____

Lizzy took the temperature at 10:00 am every day last week in Plano, TX.



What is our temperature scale? Farenheit

Why do our temps start at 50 degrees and end at 90 degrees? It's October, temperatures are likely between 50 and 90 degrees

What was the temperature October 9? How did you estimate? 81-82

Which date was the coldest? 11 Warmest? 5

Which date had the largest temperature drop? 10

Why did I use a LINE GRAPH to portray temperature? Data is continuous.

Why does the graph specify the time of the temperature taken? Temperatures vary throughout the day.

Does temperature change throughout the day? Yes.

Is it colder at noon or midnight? Midnight.

Find the sums with regrouping.

149 + 128 = 277	265 + 187 = 452	527 + 293 = 820	177 + 341 = 518	209 + 139 = 348

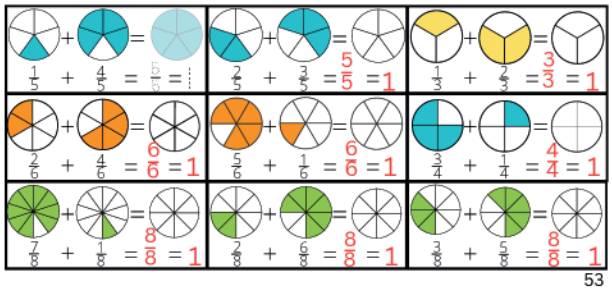
Put these numbers in order from smallest to largest.

15 81 18 115 51	15 (smallest)	18	51	81	115 (largest)
917 719 179 971 791	179 (smallest)	719	791	917	971 (largest)

Fill in the missing parts of each number sentence.

7 x 8 = 56	4 x 7 = 28	11 x 12 = 132
4 x 3 = 12	12 x 9 = 108	12 x 6 = 72
7 x 7 = 49	8 x 9 = 72	6 x 9 = 54
4 x 8 = 32	4 x 12 = 48	5 x 5 = 25
9 x 4 = 36	5 x 8 = 40	8 x 6 = 48
3 x 9 = 27	12 x 8 = 96	6 x 4 = 24
7 x 3 = 21	7 x 9 = 63	4 x 5 = 20

Add the fractions and color the sections of the empty circle to find the SUM.



Date _____

Each WHOLE day is 24 hours. This is how Lizzy spent her day today.

How did she spend most of her time?
Sleeping.

How did she spend least of her time?
Reading.

On which two activities did she spend an equal amount of time?
Practicing and Playing.

Why do all of the activities add up to 100%?
In a pie chart, it has to add up to 100%

What does YOUR daily schedule look like? Color the pie chart below. It has 24 sections, 1 section per hour. Label your sections with fractions, not percentages. So if you sleep for 8 hours, 8 sections would be sleeping and the fraction would be 8/24. Then write some questions below for your mom or dad to answer.

This pie chart has 24 sections

ANSWERS MAY VARY

Multiply the number by each of the numbers in the center circle. Write the products in the outer circle.

One tenth means one whole divided into ten parts. We can write "divided by" as 1÷10 or as $\frac{1}{10}$ or as 1/10. They all mean the same thing.

Per also means "divided by". Cent means one hundred. Per cent means "divided by one hundred".

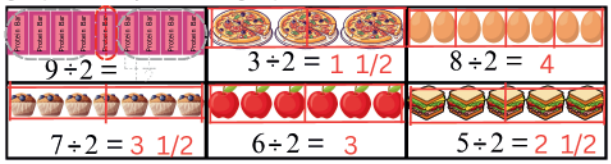
percent: $15\% = \frac{15}{100}$ (per cent)

$19\% = \frac{19}{100}$

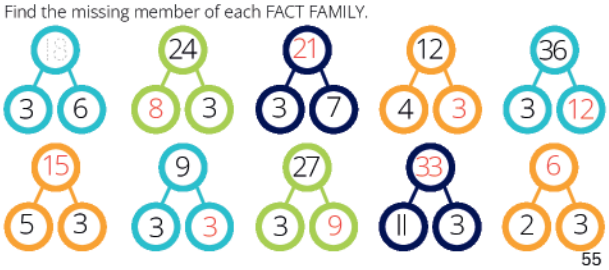
$27\% = \frac{27}{100}$ $\quad 68\% = \frac{68}{100}$ $\quad 56\% = \frac{56}{100}$

$33\% = \frac{33}{100}$ $\quad 41\% = \frac{41}{100}$ $\quad 72\% = \frac{72}{100}$

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. Split those halves between each group. How many are in each group?

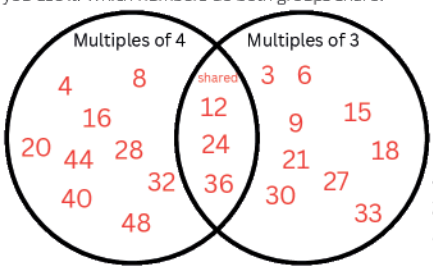


Find the missing member of each FACT FAMILY.



Date _____

Add the multiples of 3 and 4 to the correct circles. Cross out each number as you use it. Which numbers do both groups share?



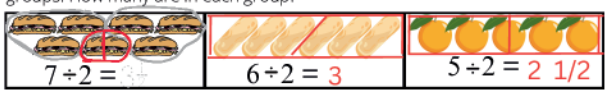
Multiples of 3

3	6	9	12
15	18	21	24
27	30	33	36

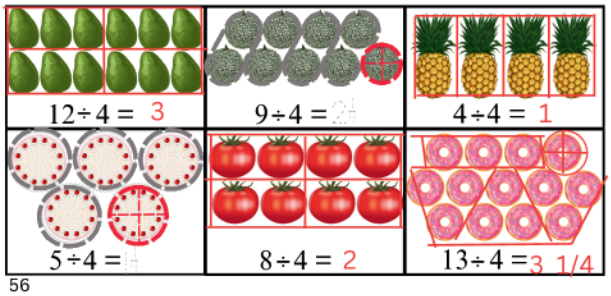
Multiples of 4

4	8	12	16
20	24	28	32
36	40	44	48

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. Split the HALVES between the two groups. How many are in each group?

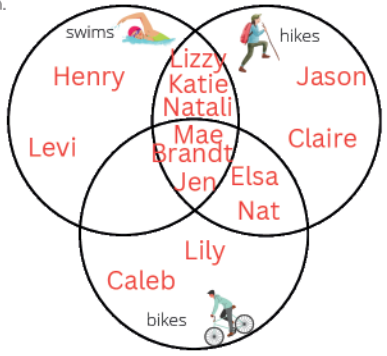


Draw lines to divide each set into equal FOURTHS. Each fourth is one group. If there is a leftover, circle it in red, then use two lines to cut it into FOURTHS. Split the leftover FOURTH between the groups. How many are in each group?



Use this chart to fill out both of the Venn Diagrams below with traits the kids in the chart have in common.

name	swims	hikes	bikes
Elsa		X	X
Caleb			X
Mae	X	X	X
Lizzy	X	X	
Henry	X		
Jason		X	
Brandt	X	X	X
Claire		X	
Jen	X	X	X
Natali	X	X	
Levi	X		
Nat		X	X
Katie	X	X	
Lily			X



Each block has 100 squares. Fill in the blanks and color squares to show each percentage.

36% = 36/100 | 75% = 75/100 | 54% = 54/100

12% = 12/100 | 60% = 60/100 | 93% = 93/100

42% = 42/100 | 99% = 99/100 | 16% = 16/100

1% = 1/100 | 88% = 88/100 | 46% = 46/100

Fill in each square with factors such that the product of each set of factors, horizontally and vertically, are correct.

3	4	12
8	12	96
24	48	

3	9	27
3	7	21
9	63	

3	8	24
10	5	50
30	40	

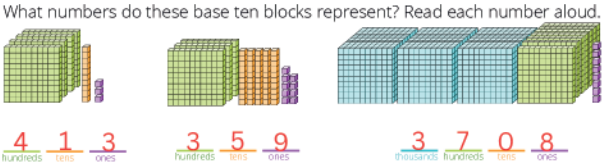
3	6	18
12	11	132
36	66	

Date _____

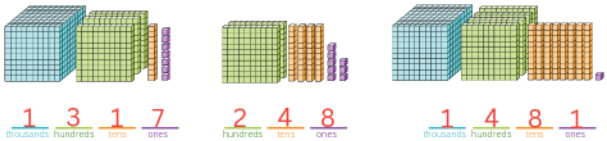
Complete the chart. Draw base ten blocks using a cube to represent each thousand, a large square to represent each hundred, a long, skinny rectangle to represent each ten and and a small square to represent each one.

Standard Form / Word Form / Expanded Form	Base Ten Blocks
2,193 One thousand four hundred ninety-seven 2000 + 100 + 90 + 3	Thousands, Hundreds, Tens, Ones
4,532 Four thousand five hundred thirty-two 4000 + 500 + 30 + 2	Thousands, Hundreds, Tens, Ones
2,679 Two thousand six hundred sevety-nine 2000 + 600 + 70 + 9	Thousands, Hundreds, Tens, Ones
3,018 Three thousand and eighteen 3000 + 10 + 8	Thousands, Hundreds, Tens, Ones

What numbers do these base ten blocks represent? Read each number aloud.



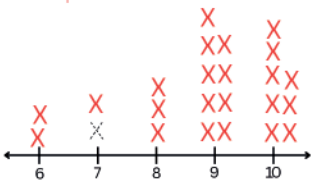
4 hundreds 1 tens 3 ones | 3 hundreds 5 tens 9 ones | 3 thousands 7 hundreds 0 tens 8 ones



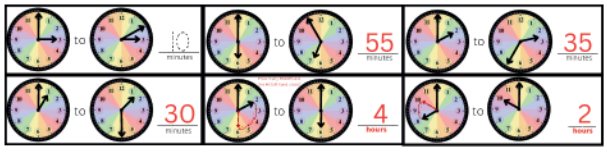
1 thousand 3 hundreds 1 ten 7 ones | 2 hundreds 4 tens 8 ones | 1 thousand 4 hundreds 8 tens 1 one

Graph these pairs of shoes on the line plot using x's.

Why did I choose the numbers 6-10 for this line plot number line?

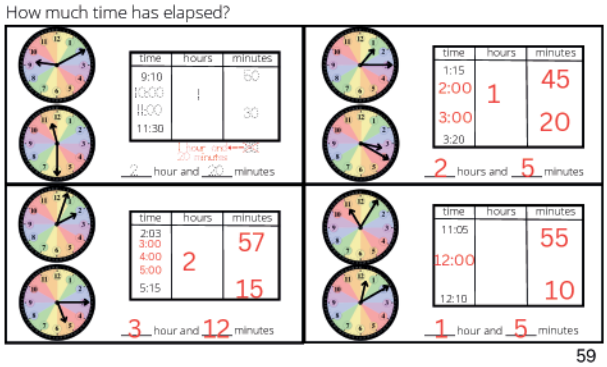


How much time has elapsed between each set of clocks?



10 minutes | 55 minutes | 35 minutes | 30 minutes | 4 hours | 2 hours

How much time has elapsed?



time	hours	minutes
9:10 10:00 11:00 11:30	1	50 30

1 hour and 20 minutes = 80 minutes

2 hour and 20 minutes

time	hours	minutes
1:15 2:00 3:00 3:20	1	45 20

2 hours and 5 minutes

time	hours	minutes
2:03 3:00 4:00 5:00 5:15	2	57 15

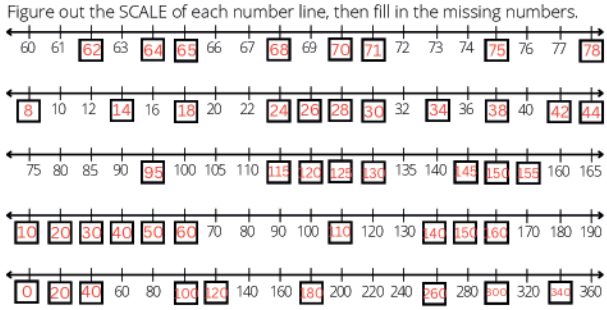
3 hour and 12 minutes

time	hours	minutes
11:05 12:00 12:10		55 10

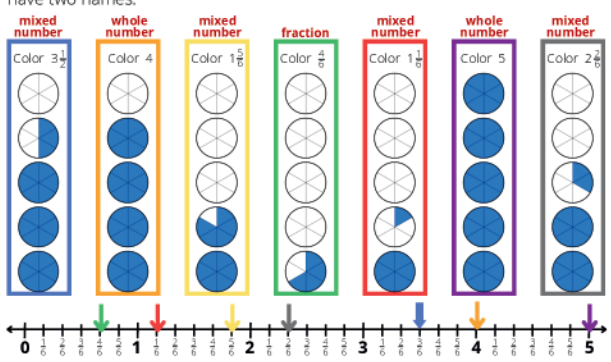
1 hour and 5 minutes

Date _____

Figure out the SCALE of each number line, then fill in the missing numbers.

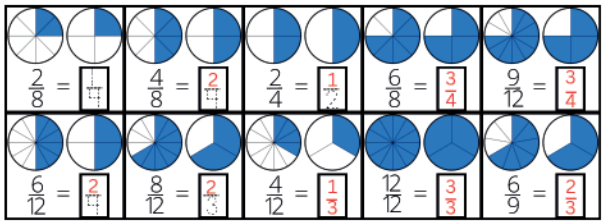


Color the number in each colored rectangle. Then draw an arrow that color pointing to the number on the number line below. Some of these fractions have two names.

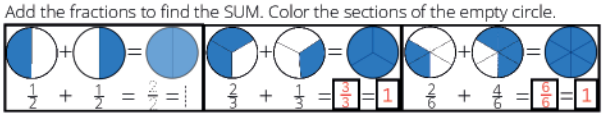


See how this number line has fractions divided into sixths. Why?

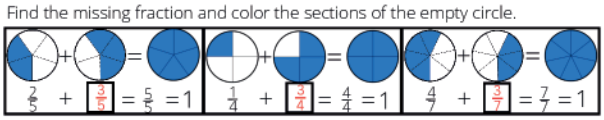
Color the shape on the RIGHT so it matches the shape on the LEFT. Then write each equivalent fractions number sentence.



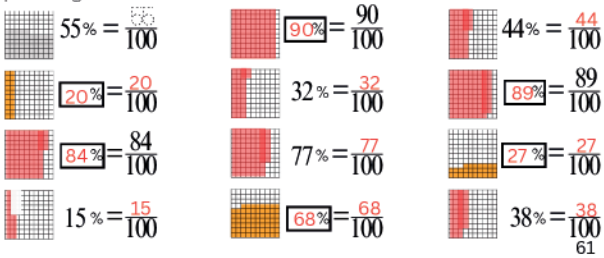
Add the fractions to find the SUM. Color the sections of the empty circle.



Find the missing fraction and color the sections of the empty circle.

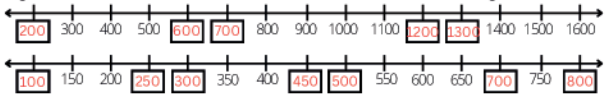


Each block has 100 squares. Fill in the blanks and color squares to show each percentage.



Date _____

Figure out the SCALE of each number line, then fill in the missing numbers.

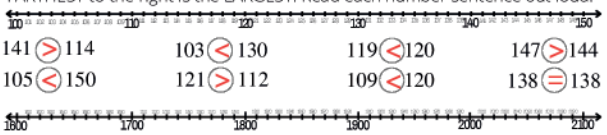


Each of the following numbers will be used once to answer a question below. Cross the number out after you use it.

~~955~~	~~742~~	~~555~~	~~399~~	~~744~~
~~380~~	~~282~~	~~110~~	~~803~~	~~1001~~

1. This number has the same number of ones, tens and hundreds. 555
2. This number is the least. 110
3. This number has three ONES. 803
4. This number is one less than four hundred. 399
5. This number is the most. 1001
6. All of the digits in this number are EVEN. 282
7. This number has zero tens and zero ones. 300
8. This number has nine HUNDREDS. 955
9. This number has the same number of tens and ones, but not hundreds. 744
10. This number has twice as many TENS as ONES. 742

Find the two numbers you are comparing on the number line. The number FARTHEST to the right is the LARGEST. Read each number sentence out loud.



Convert these length units.

18 ft = 6 yd
5 m = 5000 mm
200 mm = 20 cm
1 mi = 5280 ft
17 feet = 5 yd 2 ft

Convert these capacity units.

10 qt = 2 gal 4 pt
2 c = 16 oz
18 c = 1 gal 2 c
4 oz = 8 Tbsp
2 gal = 8 qt

Fill in each square with factors such that the product of each set of factors, horizontally and vertically, are correct.

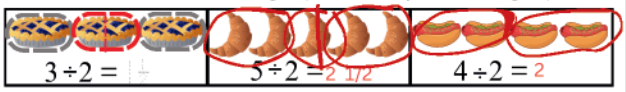
3	6	18
4	9	36
12	54	

3	8	24
10	3	30
30	24	

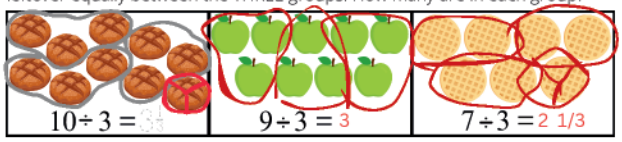
3	3	9
7	11	77
21	33	

3	12	36
5	3	15
15	36	

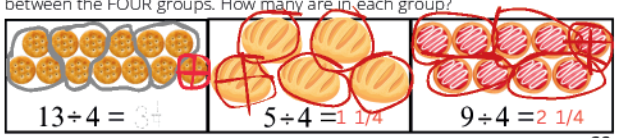
Divide each set into equal halves by drawing lines around groups. Split any leftover in HALF between the two groups. How many are in each group?



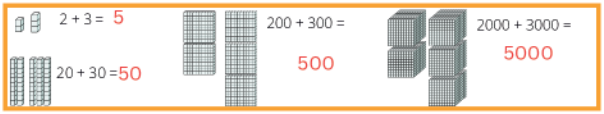
Divide each set into THIRDS by drawing lines around equal groups. Split any leftover equally between the THREE groups. How many are in each group?



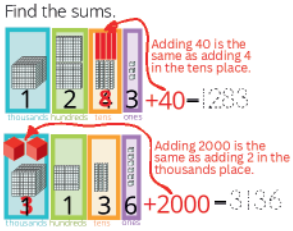
Divide each set into FOUR equal groups. Split any leftover items equally between the FOUR groups. How many are in each group?



Date _____



Find the sums.



7241 + 400 = 7641 add 4 in the hundreds place
1325 + 3 = 1328 add 3 in the ones place
8134 + 20 = 8154 add 2 in the tens place
2768 + 5000 = 7768 add 5 in the thousands place
4092 + 400 = 4492 add 4 in the hundreds place
3610 + 1000 = 4610 add 1 in the thousands place
5507 + 300 = 5807 add 3 in the hunreds place

Find the products.

3 x 9 = 27
3 x 6 = 18
3 x 8 = 24
3 x 5 = 15
3 x 7 = 21
3 x 3 = 9
3 x 11 = 33
3 x 10 = 30
3 x 4 = 12
3 x 12 = 36
3 x 2 = 6
3 x 1 = 3

4 x 6 = 24
4 x 12 = 48
4 x 1 = 4
4 x 5 = 20
4 x 11 = 44
4 x 4 = 16
4 x 7 = 28
4 x 1 = 4
4 x 3 = 12 (four, three times equals three, four times)
4 x 8 = 32
4 x 9 = 36
4 x 10 = 40

Find the quotients.

12 ÷ 4 = 3
21 ÷ 3 = 7
27 ÷ 3 = 9
36 ÷ 4 = 9
12 ÷ 3 = 4
32 ÷ 4 = 8
24 ÷ 4 = 6
15 ÷ 3 = 5
28 ÷ 4 = 7
24 ÷ 3 = 8
48 ÷ 4 = 12
36 ÷ 3 = 12

The commutative property of multiplication states that the same numbers can be multiplied in any order and the resulting PRODUCT will be the same.

Word Form	Expanded	Standard
Eight hundred fifty-three	800+50+3	853
One thousand ninety-six	1000 + 90 + 6	1096
Two hundred eighty-seven	200 + 80 + 7	287
Nine hundred forty	900 + 40	940
One hundred nineteen	100 + 10 + 9	119
Three hundred three	300 + 3	303
Five hundred sixty-eight	500 + 60 + 8	568
Six hundred fifty-two	600 + 50 + 2	652
Four hundred forty-four	400 + 40 + 4	444
One thousand four hundred	1000 + 400	1400

Which number is the largest?

1400

Which number is the smallest?

119

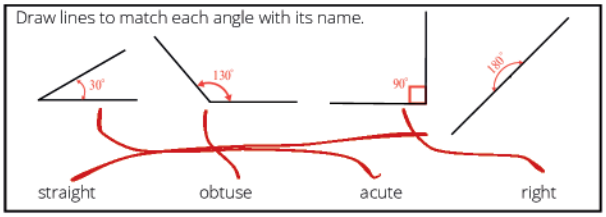
Which number has all even digits?

444

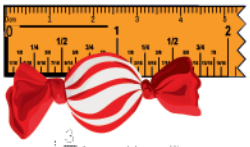
Which number has zero tens and zero ones?

1400

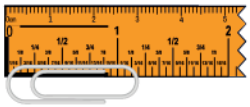
Draw lines to match each angle with its name.



Use these broken pieces of rulers to find the length of each item.

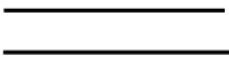


$1\frac{3}{4}$ in. 4cm 5mm



$1\frac{3}{16}$ in. 3 cm

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



$2\frac{1}{2}$ in. 6cm 4mm

3 in. 7cm 5mm

Date _____

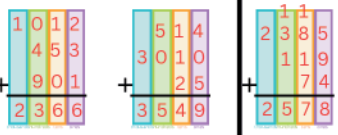
Find the sums.

Use the templates at the right to figure out these SUMS.

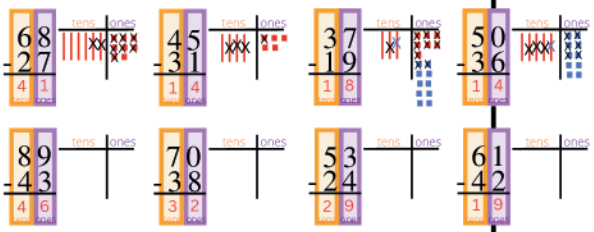
1012 + 453 + 901 = 2366

514 + 3010 + 25 = 3549

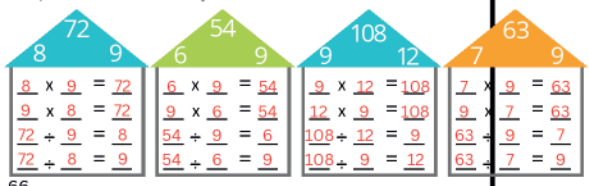
2385 + 119 + 74 = 2578



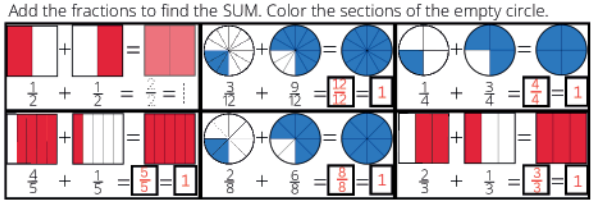
Use the tens and ones charts to find the differences.



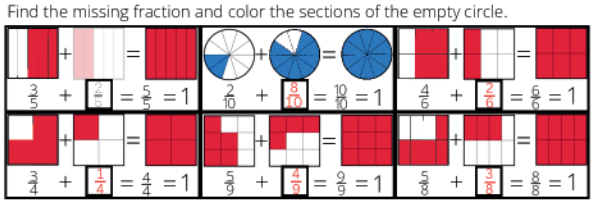
Complete these Fact Family houses.



Add the fractions to find the SUM. Color the sections of the empty circle.



Find the missing fraction and color the sections of the empty circle.



How much money is this?

$6.76 $1.70 $10.77 $2.26 $2.56

1212 + 300 = 1512 add 3 in the hundreds place

5375 + 3000 = 8375 add 3 in the thousands place

4838 + 50 = 4888 add 5 in the tens place

2128 + 500 = 2628 add 5 in the hundreds place

4059 + 20 = 4079 add 2 in the tens place

6630 + 2000 = 8630 add 2 in the thousands place

3546 + 400 = 3946 add 4 in the hunreds place

5010 + 6 = 5016 add 6 in the ones place

1102 + 30 = 1132 add 3 in the tens place

1018 + 200 = 1218 add 2 in the hundreds place

768 + 4000 = 4768 add 4 in the thousands place

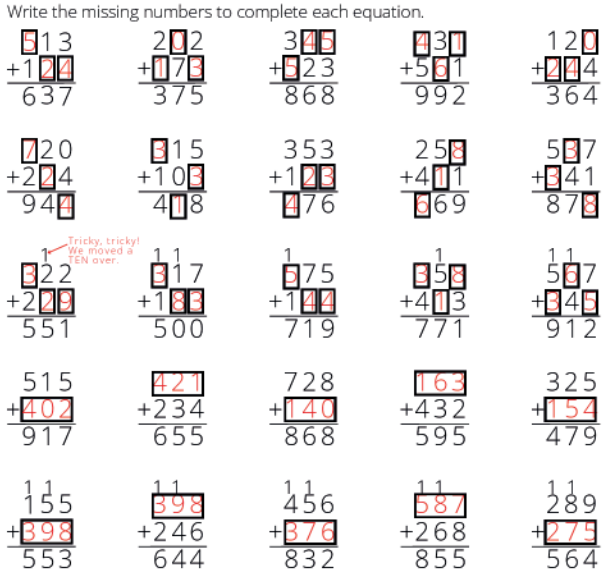
1249 + 400 = 1649 add 4 in the hundreds place

2410 + 1000 = 3410 add 1 in the thousands place

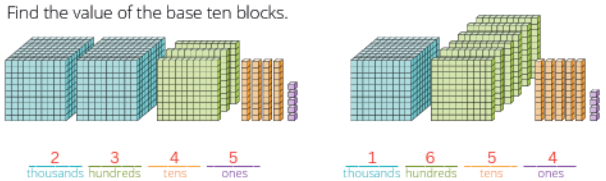
1401 + 8 = 1409 add 8 in the ones place

Date _____

Write the missing numbers to complete each equation.



Find the value of the base ten blocks.



Plot each number on the number line, then round to the nearest TEN:

Rounding to the nearest ten? Circle the TENS place, then underline the number in the ONES place.

15 20 (Five or more? Let the 1 soar (round up to 2).)
12 10 (Four or less? Let the 1 rest.)
37 40
42 40
25 30
56 60

Four or less? Let it rest. Five or more? Let it soar.

Round to the nearest HUNDRED:

Rounding to the nearest hundred? Circle the HUNDREDS place, then underline the number in the TENS place.

650 700 (Five or more? Let the 6 soar (round up to 7).)
149 100 (Four or less? Let the 1 rest.)
287 300 (Five or more? Let the 2 soar (round UP to 3).)
125 100
399 400
605 600
475 500
333 300
590 600
551 600
549 500
228 200

Round to the nearest THOUSAND:

Rounding to the nearest thousand? Circle the THOUSANDS place, then underline the number in the HUNDREDS place.

505 1000 (If there is no digit, it's a zero. Five or more? Let the 5 soar (round UP to 1).)
2719 3000 (Five or more? Let the 7 soar (round UP to 3).)
1182 1000 (Four or less? Let the 1 rest.)
382 0
998 1000
1550 2000
2939 3000
2530 3000
1344 1000
213 0
2812 3000
1827 2000

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

3/4 in.	2 cm
2 3/4 in.	7 cm
6 in.	15cm 2mm
4 in.	10cm 1mm
3 3/4 in.	9cm 5mm

Date _____

Decompose numbers into smaller parts that are easier to add and subtract.

Example: 23 + 45 = ?
(20 + 3) + (40 + 5) = ?
then regroup the numbers; tens together and ones together
(20 + 40) + (3 + 5) = 68
and presto!
easy to add! easy to add!

Use mental math to find the sum of each problem.

Problem	Decompose	Rearrange	Sum
31 + 44	(30 + 1) + (40 + 4)	(30 + 40) + (1 + 4)	75
25 + 34	(20 + 5) + (30 + 4)	(20 + 30) + (5 + 4)	59
46 + 12	(40 + 6) + (10 + 2)	(40 + 10) + (6 + 2)	58
52 + 41	(50 + 2) + (40 + 1)	(50 + 40) + (2 + 1)	93
22 + 60	(20 + 2) + (60 + 0)	(20 + 60) + (2 + 0)	82
43 + 54	(40 + 3) + (50 + 4)	(40 + 50) + (3 + 4)	97
17 + 52	(10 + 7) + (50 + 2)	(10 + 50) + (7 + 2)	69
61 + 38	(60 + 1) + (30 + 8)	(60 + 30) + (1 + 8)	99
35 + 23	(30 + 5) + (20 + 3)	(30 + 20) + (5 + 3)	58
83 + 15	(80 + 3) + (10 + 5)	(80 + 10) + (3 + 5)	98

When you have too many ones, regroup them into TENS and ones.

56 + 38	(50 + 6) + (30 + 8)	(80 + 30) + (6 + 8) → 80 + 10 + 4	94
47 + 36	(40 + 7) + (30 + 6)	(70 + 30) + (7 + 6) → 70 + 10 + 3	83
35 + 29	(30 + 5) + (20 + 9)	(30 + 20) + (5 + 9) → + 10 + 4	64

Write the missing numbers to complete each equation.

412 +364 = 776	214 +104 = 318	331 +323 = 654	915 +060 = 975	100 +243 = 343
312 +312 = 624	114 +102 = 216	323 +023 = 346	301 +311 = 612	217 +320 = 537
11 343 +397 = 740	11 115 +186 = 301	11 367 +166 = 533	11 389 +238 = 627	11 179 +374 = 553

Each animal represents a missing number. What number does each animal represent?

🦁+🦁+🦁+🦁+🦁 = 30
🦁 x 🐢 = 30
🦁+🐢+🐢+🐘+🐘 = 34
🐘+🦁+🐢+🐟 = 24
🦊 x 🐘 = 27
🦁+🦁+🦁+🐘+🐢+🐟 = 39

🦊 = 3
🐢 = 5
🐘 = 9
🐟 = 4
🦁 = 6

Could we have used different animal to represent each number? Let's use LETTERS to represent numbers. What number does each letter represent?

X+X+X = 12
X+Z = 7
Z+X+Y = 12
X+X+Z+Y+Y = 21

14 - X = 10
28 - Z = 25
Y+11 = 16
X + 5 = 9

X = 4
Y = 5
Z = 3

Date _____

You are a library volunteer and they need your help to organize the children's section. You counted the number of books they have in each category.

picture books	117
chapter books	248
early readers	88
board books	35
biographies	27
nonfiction	175

How many more board books are there than biographies?

27 (part) + 8 (part) = 35 (whole)

part 27 (number of biographies); whole 35 (number of board books)

How many fewer board books does the library have than early readers?

53 (part) + 35 (part) = 88 (whole)

part 53 (number of board books); whole 88 (number of early readers)

We want to shelve the biographies and nonfiction books together. How many are there altogether?

27 (part) + 175 (part) = 202 (whole)

part 27 (number of biographies); part 175 (number of nonfiction); whole 202

Three boxes, each with 12 picture books were delivered. How many picture books do we have now?

117 (part) + 36 (part) = 153 (whole)

part 117 (number of picture books); part 36 (new picture books); whole 153

How many books does our children's section contain altogether (include the new picture books). Draw a picture and write a number sentence.

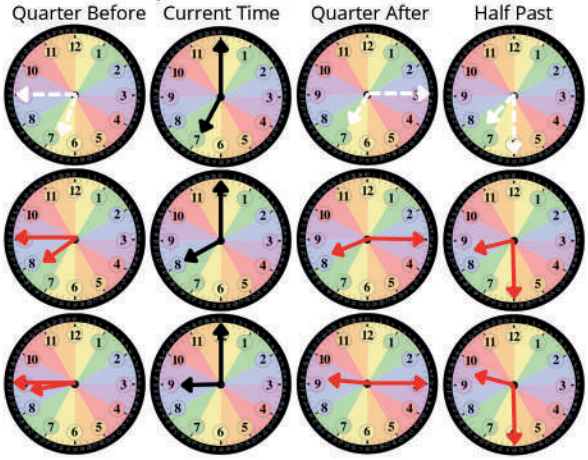
726

X represents the missing addends. What does x represent?

10 - X = 3	X = 7	X + 3 = 7	X = 4
5 + X = 7	X = 2	10 - X = 4	X = 6
9 - X = 5	X = 4	X + 8 = 10	X = 2

The clocks in the second column show the current time. Draw hands on the clocks in the other columns to show quarter before the current time, then quarter after and half past. Remember that the MINUTE hand moves around the entire circle while the HOUR hand just moves across it's HOME.

Quarter Before | Current Time | Quarter After | Half Past



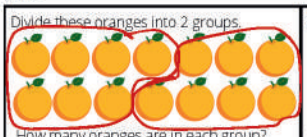
What comes next?

450, 460, 470, 480, 490, 500, 510, 520, 530, 540

112, 109, 106, 103, 100, 97, 94, 91, 88, 85

Date _____

Divide these oranges into 2 groups.

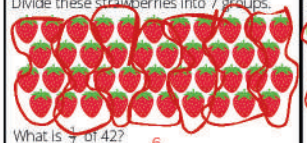


How many oranges are in each group?
What is $\frac{1}{2}$ of 14? 7

Divide these pomegranates into 3 groups.

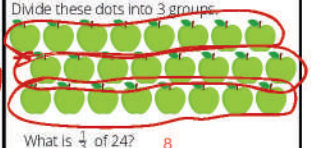
How many pomegranates are in each group?
What is $\frac{1}{3}$ of 6? 2

Divide these strawberries into 7 groups.



What is $\frac{1}{7}$ of 42? 6

Divide these dots into 3 groups.



What is $\frac{1}{3}$ of 24? 8

Finish the pattern:

380, 385, 390, 395, 400, 405, 410, 415, 420

393, 396, 399, 402, 405, 408, 411, 414, 417

Identify and label all of the parts, then complete the number sentences.

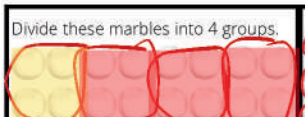
8 = 6 + 2
8 = 2 + 6
8 = 4 + 4
8 = 4 + 4
8 = 3 + 5
8 = 5 + 3
8 = 1 + 7
8 = 7 + 1

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

What is the Commutative Property of Addition? _____

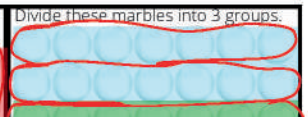
Changing the order of addends does not change the sum.

Divide these marbles into 4 groups.



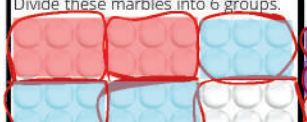
Color $\frac{1}{4}$ of the marbles yellow and $\frac{3}{4}$ of the marbles red.

Divide these marbles into 3 groups.



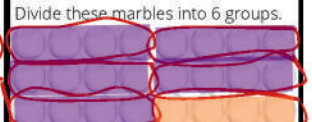
Color $\frac{1}{3}$ green and $\frac{2}{3}$ blue.

Divide these marbles into 6 groups.



Color $\frac{2}{6}$ red and $\frac{3}{6}$ blue. Leave the rest white. How many are white? 6

Divide these marbles into 6 groups.



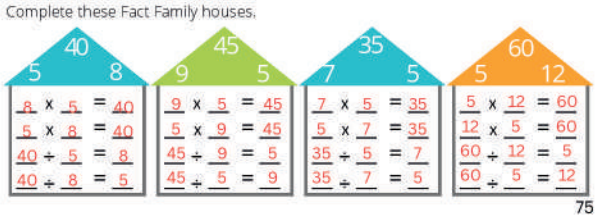
Color $\frac{5}{6}$ purple and $\frac{1}{6}$ orange

Use your FRACTION CIRCLES to compare these fractions by drawing the correct comparison symbol (<, >, =) between them.

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

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

Complete these Fact Family houses.



40 (5, 8)	45 (9, 5)	35 (7, 5)	60 (5, 12)
8 x 5 = 40	9 x 5 = 45	7 x 5 = 35	5 x 12 = 60
5 x 8 = 40	5 x 9 = 45	5 x 7 = 35	12 x 5 = 60
40 ÷ 5 = 8	45 ÷ 9 = 5	35 ÷ 5 = 7	60 ÷ 12 = 5
40 ÷ 8 = 5	45 ÷ 5 = 9	35 ÷ 7 = 5	60 ÷ 5 = 12

Date _____

Division:

$\frac{8}{4} = 2$ $\quad 8 \div 4 = 2$ $\quad 4\overline{)8}\ 2$ $\quad$ divisor) dividend — quotient

Truths:
Division by ZERO is ILLEGAL.
0/0 is INDETERMINATE.
Division by ONE is ITSELF.
Multiplication by one is itself.

Use circles to group the items, then complete the equations.

$\frac{24}{3} = 8$ $\quad 24 \div 3 = 8$ $\quad 3\overline{)24}^{8}$ $\quad$ What is 1/3 of 24? 8

$\frac{25}{5} = 5$ $\quad 25 \div 5 = 5$ $\quad 5\overline{)25}^{5}$ $\quad$ What is 1/5 of 25? 5

$\frac{12}{3} = 4$ $\quad 12 \div 3 = 4$ $\quad 3\overline{)12}^{4}$ $\quad$ What is 1/3 of 12? 4

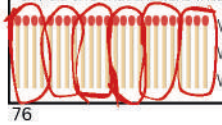
Divide the marbles into SIX equal groups.

What is 1/6 of 18? 3 $\quad$ What is 4/6 of 18? 12
What is 2/6 of 18? 6 $\quad$ What is 5/6 of 18? 15
What is 3/6 of 18? 9 $\quad$ What is 6/6 of 18? 18

Divide the cubes into SIX equal groups.

What is 1/6 of 12? 2 $\quad$ What is 4/6 of 12? 8
What is 2/6 of 12? 4 $\quad$ What is 5/6 of 12? 10
What is 3/6 of 12? 6 $\quad$ What is 6/6 of 12? 12

Divide the matchsticks into SIX equal groups.



What is 1/6 of 24? 4 $\quad$ What is 4/6 of 24? 16
What is 2/6 of 24? 8 $\quad$ What is 5/6 of 24? 20
What is 3/6 of 24? 12 $\quad$ What is 6/6 of 24? 24

Draw lines to match each fraction to its meaning.

0 — $\frac{0}{1}$

1 — $\frac{1}{1}$

indeterminate — $\frac{0}{0}$

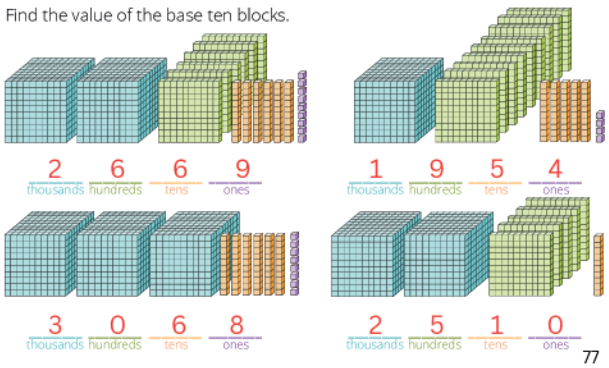
undefined — $\frac{1}{0}$

2 — $\frac{4}{2}$

Put these numbers in order from smallest to largest.

512	521	502	215	520	215 (smallest)	502	512	520	521 (largest)
697	796	976	679	967	679 (smallest)	697	796	967	976 (largest)

Find the value of the base ten blocks.



2 thousands 6 hundreds 6 tens 9 ones

1 thousands 9 hundreds 5 tens 4 ones

3 thousands 0 hundreds 6 tens 8 ones

2 thousands 5 hundreds 1 tens 0 ones

Date _____

Exponents:

$2^0 = 1$ $2^3 = 2 \times 2 \times 2 = 8$

$3^0 = 1$ $3^3 = 3 \times 3 \times 3 = 27$

$4^0 = 1$ $4^3 = 4 \times 4 \times 4 = 64$

$5^0 = 1$ $5^3 = 5 \times 5 \times 5 = 125$

$2^1 = 2$ $2^4 = 2 \times 2 \times 2 \times 2 = 16$

$3^1 = 3$ $3^4 = 3 \times 3 \times 3 \times 3 = 81$

$4^1 = 4$ $4^4 = 4 \times 4 \times 4 \times 4 = 256$

$5^1 = 697$ $5^4 = 5 \times 5 \times 5 \times 5 = 625$

$2^2 = 2 \times 2 = 4$ $2^5 = 2 \times 2 \times 2 \times 2 \times 2 = 32$

$3^2 = 3 \times 3 = 9$ $3^5 = 3 \times 3 \times 3 \times 3 \times 3 = 243$

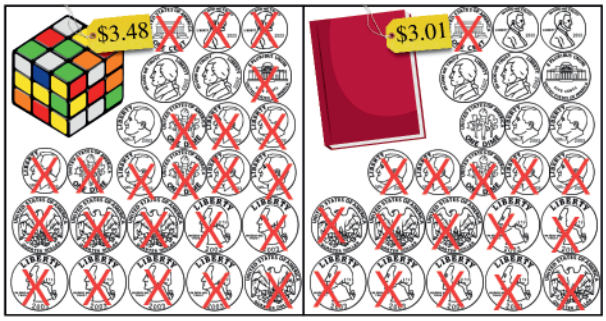
$4^2 = 4 \times 4 = 16$ $4^5 = 4 \times 4 \times 4 \times 4 \times 4 = 1024$

$5^2 = 5 \times 5 = 25$ $5^5 = 5 \times 5 \times 5 \times 5 \times 5 = 3125$

Multiply the number by each of the numbers in the center circle. Write the products in the outer circle.

2 less	2 more	20 less	20 more	200 less	200 more
85, 87, 89		125, 145, 165		197, 397, 597	
114, 116, 118		332, 352, 372		201, 401, 601	
700, 702, 704		844, 864, 884		410, 610, 810	

Color the coins needed to buy each item.



Find the missing member of each FACT FAMILY.

Date _____

Find the positive square roots.

$\sqrt{16} = 4$ $\sqrt{25} = 5$

$\sqrt{81} = 9$ $\sqrt{1} = 1$

$\sqrt{36} = 6$ $\sqrt{4} = 2$

$\sqrt{64} = 8$ $\sqrt{49} = 7$

Find the roots.

$\sqrt[3]{64} = 4$

$\sqrt[3]{8} = 2$

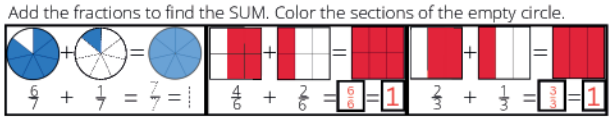
$\sqrt[3]{125} = 5$

$\sqrt[3]{27} = 3$

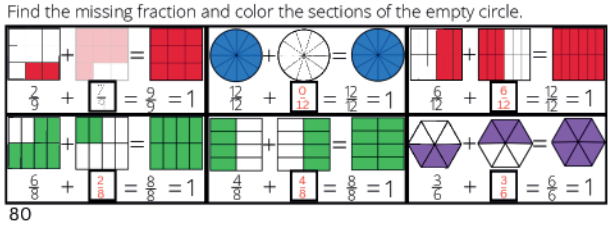
Use a calculator to find the following exponential numbers and positive roots.

$2^5 = 32$	$5^3 = 125$	$\sqrt{81} = 9$	$\sqrt[3]{216} = 6$
$8^3 = 512$	$7^3 = 343$	$\sqrt[4]{16} = 2$	$\sqrt[5]{32} = 2$
$4^4 = 256$	$3^4 = 81$	$\sqrt[4]{256} = 4$	$\sqrt[4]{81} = 3$
$3^5 = 243$	$2^8 = 256$	$\sqrt[5]{243} = 3$	$\sqrt[3]{1} = 1$

Add the fractions to find the SUM. Color the sections of the empty circle.



Find the missing fraction and color the sections of the empty circle.



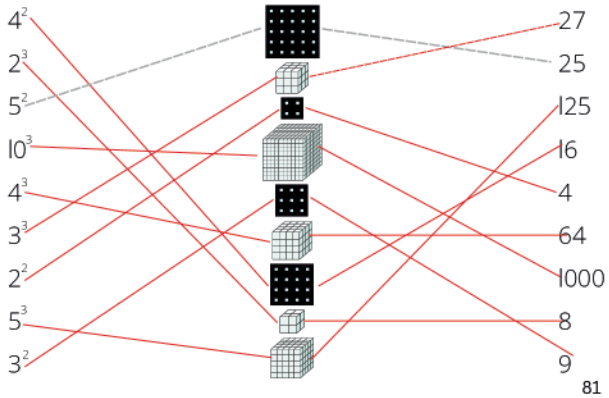
2^0 = 1
2^1 = 2
2^2 = 2 x 2 = 4
2^3 = 2 x 2 x 2 = 8
2^4 = 2 x 2 x 2 x 2 = 16
2^5 = 2 x 2 x 2 x 2 x 2 = 32

3^0 = 1
3^1 = 3
3^2 = 3 x 3 = 9
3^3 = 3 x 3 x 3 = 27
3^4 = 3 x 3 x 3 x 3 = 81
3^5 = 3 x 3 x 3 x 3 x 3 = 243

	ten thousands	thousands	hundreds	tens	ones
23 x 1 =				2	3
23 x 10 =			2	3	0
23 x 100 =		2	3	0	0
23 x 1000 =	2	3	0	0	0

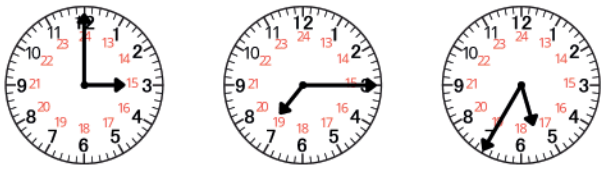
	ten thousands	thousands	hundreds	tens	ones
84 x 1 =				8	4
84 x 10 =			8	4	0
84 x 100 =		8	4	0	0
84 x 1000 =	8	4	0	0	0

Draw lines to connect each column.



Date _____

Read and write each time in 12-hour and 24-hour time formats.



12-hour: 3 P.M. 12-hour: 7:15 A.M. 12-hour: 5:35 P.M.
24-hour: 15:00 24-hour: 19:15 24-hour: 17:35

Convert each time from 12-hour format to 24-hour format. (add 12 HOURS to all PM times)

1:25 AM = 1:25
5:05 PM = 17:05
3:39 PM = 15:39
12:13 PM = 12:13
5:18 AM = 5:18
11:20 PM = 23:20

Convert each time from 24-hour format to 12-hour format. Include A.M or P.M.

20:15 = 8:15 PM
04:04 = 4:04 AM
19:37 = 7:37 PM
01:12 = 1:12 AM
09:55 = 9:55 AM
13:30 = 1:30 PM
11:01 = 11:01 AM
23:01 = 11:01 PM
15:15 = 3:15 PM

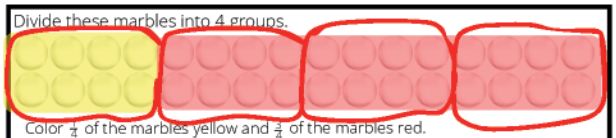
The girls board the train at 17:45. Their trip will take 4 hours 8 minutes. What time will they arrive (in 24-hour time)? Draw the hands on the clocks.

departure

arrival

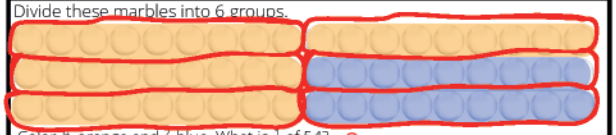
time	hours	minutes
17:45	4	8
21:45		
21:53		

Divide these marbles into 4 groups.



Color $\frac{1}{4}$ of the marbles yellow and $\frac{2}{4}$ of the marbles red.

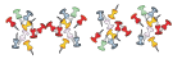
Divide these marbles into 6 groups.



Color $\frac{4}{6}$ orange and $\frac{2}{6}$ blue. What is $\frac{1}{6}$ of 54? 9

Use circles to group the items, then complete the equations.

$\frac{20}{4} = 5$ $20 \div 4 = 5$ $4\overline{)20}$ (5) What is 1/4 of 20? 5



$\frac{36}{4} = 9$ $36 \div 4 = 9$ $4\overline{)36}$ (9) What is 1/4 of 36? 9

$\frac{28}{4} = 7$ $28 \div 4 = 7$ $4\overline{)28}$ (7) What is 1/4 of 28? 7

Fill in each square to complete each number sentence correctly.

2	x	5	=	10
x		x		x
3	x	1	=	3
=		=		=
6	x	6	=	36

2	x	4	=	8
x		x		x
3	x	3	=	9
=		=		=
6	x	12	=	72

1	x	2	=	2
x		x		x
4	x	3	=	12
=		=		=
4	x	6	=	24

Date _____

Use your calendar to answer the following questions:

1. How many days are there between Valentine's Day and St. Patrick's Day? _____
2. You are going on vacation in ten days. What will be the date? _____
3. Your piano teacher gave you a new song today. She wants you to learn and memorize it for your recital May 15. How many days do you have? _____

ANSWERS WILL VARY

Draw lines to match each month to the number of days it has.

You started reading at 19:10. Your book took two hours and 15 minutes to finish. What time (24-hour time)did you finish?

begin

finish

time	hours	minutes
19:10	2	15
19:25		
21:25		

add/subtract 3 in the ONES place

3 less 3 more

811, 814, 817
223, 226, 229
590, 593, 596

add/subtract 3 in the TENS place

30 less 30 more

183, 153, 123
315, 345, 375
609, 639, 669

add/subtract 3 in the HUNDREDS place

300 less 300 more

98, 398, 698
225, 525, 825
109, 409, 709

Find the sums and differences.

51 + 13 = 64	47 + 24 = 71	39 + 27 = 66	28 + 50 = 78	86 + 24 = 62
42 - 15 = 27	15 + 35 = 50	50 - 27 = 23	20 - 19 = 1	33 - 24 = 9
59 + 29 = 88	86 - 48 = 38	91 - 47 = 44	36 + 40 = 76	48 - 28 = 20

What number does each letter represent?

A+A+A= 15
A+B+C = 18
2 x B = 14
A+C+B+B= 25

16 - C = 10
25 - C = 19
A +14 = 19
B + 9 = 16

A = 5
B = 7
C = 6

Fill in each square with factors such that the product of each set of factors, horizontally and vertically, are correct.

5 7 35 5 3 15 25 21	2 6 12 3 5 15 6 30	5 2 10 4 7 28 20 14	5 9 45 8 3 24 40 27
2 5 10 9 11 99 18 55	5 8 40 10 6 60 50 48	2 5 10 9 4 36 18 20	5 6 30 2 7 14 10 42
2 8 16 6 7 42 12 56	2 10 20 7 4 28 14 40	5 11 55 1 3 3 5 33	2 9 18 8 11 88 16 99

Date _____

You gave the cashier $2.00 to buy juice that cost $1.33. What is your change? Color coins to count UP from $1.33 to $2.00

200 − 133 = 67

$2.00 = 200¢
$1.33 = 133¢

You gave the cashier $5.00 to buy a sandwich that was $3.49. What is your change? Color coins to count UP from $3.49 to $5.00

500 − 349 = 151

$5.00 = 500¢
$3.49 = 349¢

You gave the cashier $5.00 to buy a salad for $2.89. What is your change? Color coins to count UP from $2.89 to $5.00

500 − 289 = 211

$5.00 = 500¢
$2.89 = 289¢

answers may vary

What comes next?

108, 99, 90, 81, 72, 63, 54, 45, 36, 27
45, 50, 55, 60, 65, 70, 75, 80, 85, 90
16, 24, 32, 40, 48, 56, 64, 72, 80, 88
84, 77, 70, 63, 56, 49, 42, 35, 28, 21, 14
2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22

Convert these time periods:

1 year = 365 days
1 day = 24 hours
1 hour = 60 minutes
1 minute = 60 seconds
7 days = 1 week

90 seconds = 1 minute 30 seconds
25 hours = 1 day 1 hour
9 days = 1 week 2 days
30 minutes = 1/2 hour
12 months = 1 year

Complete the blanks in these circles.

Find the missing numbers to complete each equation.

411 + 233 = 644	416 + 183 = 599	253 + 101 = 354	621 + 131 = 752	562 + 6 = 568
115 + 125 = 240	213 + 387 = 600	295 + 238 = 533	168 + 157 = 325	139 + 141 = 280

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

343 + X = 740	X + 186 = 301	367 + X = 533	X + 238 = 627	179 + X = 553
X= 397	X= 118	X= 166	X= 389	X= 374

Date _____

Fill out this check to pay Toys R Us for a new toy. You decide the amount.

DATE _____
PAY TO THE ORDER OF _____ $ _____
_____ DOLLARS
LifeSkillsBank
12347659 : 00334 1234 _____

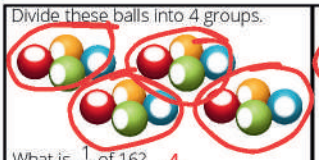
ANSWERS MAY VARY

You earned $50 and you received $30 for your birthday. Save some then write the rest as a deposit on the first line. Then follow the instructions below at least four times.

1. Choose an item to buy.
2. Round the price of the item to the nearest dollar.
3. Write the rounded price of the item in the expense column.
4. Subtract the rounded amount from the balance and write your new balance.
5. Repeat.

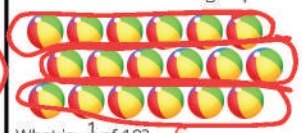
Memo	Deposit	Expense	Balance

Divide these balls into 4 groups.

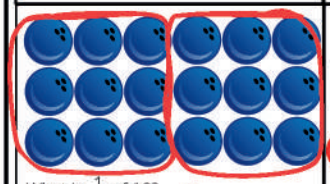


What is $\frac{1}{4}$ of 16? 4

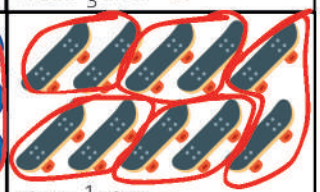
Divide these balls into 3 groups.



What is $\frac{1}{3}$ of 18? 6



What is $\frac{1}{2}$ of 18? 9



What is $\frac{1}{5}$ of 10? 2

Fill in the missing numbers then color the squares with EVEN numbers yellow.

505	504	503	502	501	500	499	498	497	496

How long is your game?

time	hours	minutes
11:15 AM	3	45
12:00		
3:00		30
3:30 PM		

75 minutes

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

4 hours and 15 minutes

How long is your flight?

time	hours	minutes
8:10 AM	4	50
9:00		
1:00		30
1:30 PM		

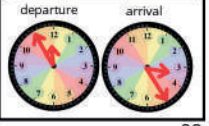
80 minutes

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

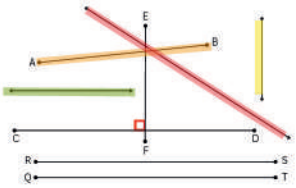
5 hours and 20 minutes

Your field trip starts at 2:10 PM. It will take you 3 hours and 15 minutes to drive there. What time should you leave?

time	hours	minutes
5:25		15
5:10	3	
2:10 PM		



Date _____



1. Trace line segment $\overline{AB}$ orange.
2. Trace the oblique LINE red.
3. Trace the horizontal LINE green.
4. Trace the vertical LINE yellow.
5. Name the two perpendicular line segments: EF and CD
6. Name the two parallel line segments: RS and QT

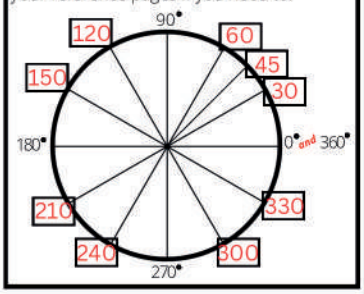
Draw:

Right Angle (include the small square)

Acute Angle

Obtuse Angle

Fill in the boxes around this circle with the correct angle measurements. Use your reference pages if you need to.



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.

Fill in each square with factors such that the product of each set of factors, horizontally and vertically, are correct.

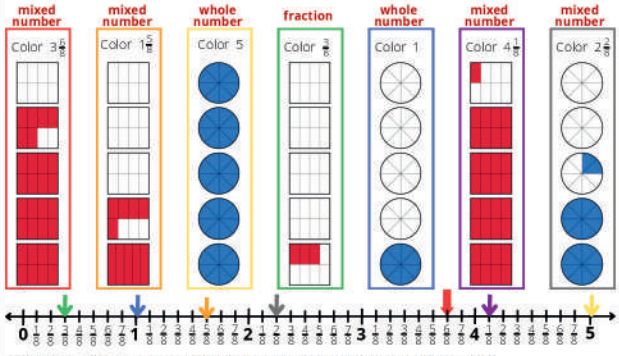
5 ? 40 3 4 12 15 32	9 8 72 7 5 35 63 40	11 6 66 11 9 99 121 54	8 8 64 6 12 72 48 96
12 3 36 12 8 96 144 24	7 12 84 7 4 28 49 48	6 9 54 8 6 48 48 54	9 2 18 8 11 88 72 22
10 2 20 5 6 30 50 12	7 8 56 11 6 66 77 48	8 6 48 12 3 36 96 18	12 11 132 7 5 35 84 55

What comes next?

8, 16, 24, 32, 40, 48, 56, 64, 72, 80, 88, 96

7, 14, 21, 28, 35, 42, 49, 56, 63, 70, 77, 84

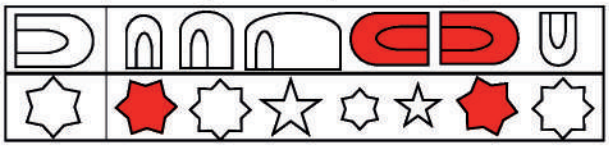
Color the number in each colored rectangle. Then draw an arrow that color pointing to the number on the number line below. Some of these fractions have two names.



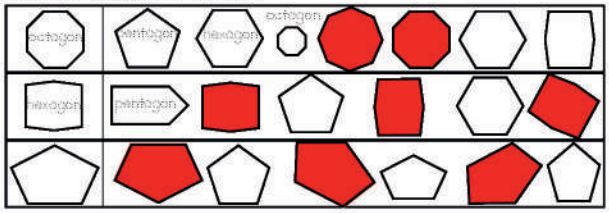
Why does this number line have fractions divided into eighths?

Date _____

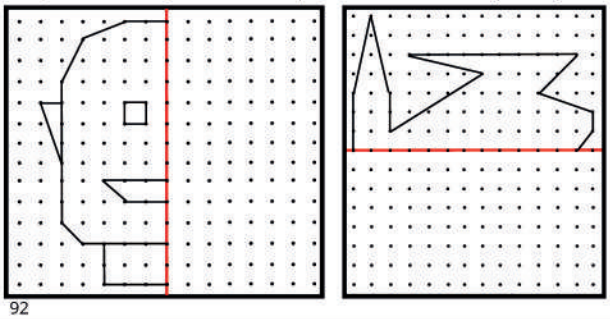
Color the shapes on the right that are congruent to the shape on the left.



Color the shapes on the right that are congruent to the shape on the left. Label each polygon with its name.



Complete the missing half of each shape across the red line of symmetry.



Each block has 100 squares. Fill in the blanks and color squares to illustrate each percentage equation.

45% = 45/100

11% = 11/100

84% = 84/100

71% = 71/100

93% = 93/100

29% = 29/100

38% = 38/100

15% = 15/100

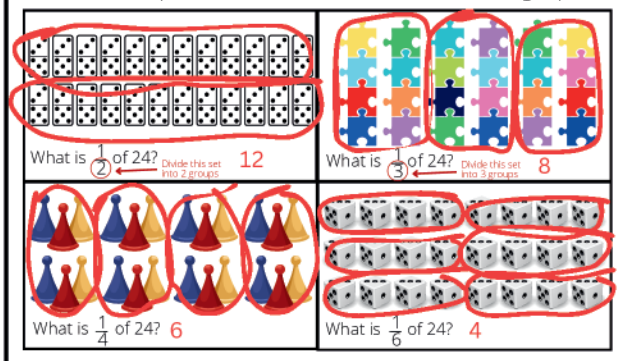
51% = 51/100

6% = 6/100

56% = 56/100

33% = 33/100

Divide each SET into the number of groups that is the DENOMINATOR of the fraction. For example, if the denominator is 2, divide the set into 2 groups.

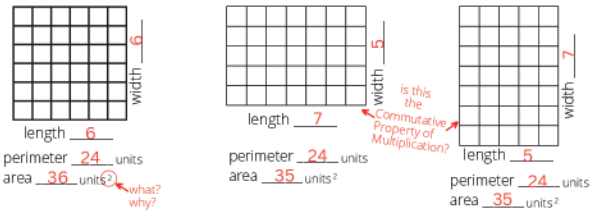


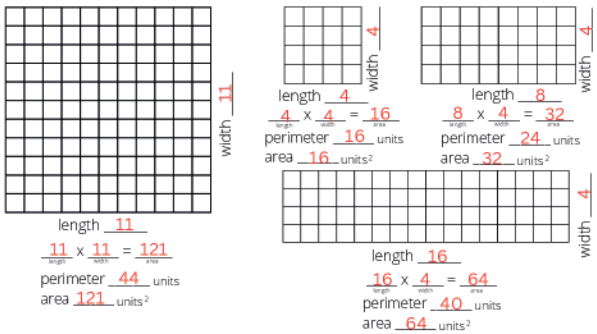
What comes next?

12, 24, 36, 48, 60, 72, 84, 96, 108, 120, 132, 144

120, 115, 110, 105, 100, 95, 90, 85, 80, 75, 70

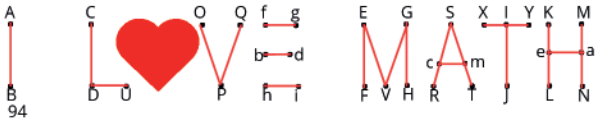
Date _____

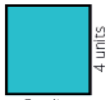




Use a ruler to draw these line segments:

$\overline{AB}$	$\overline{GH}$	$\overline{MN}$	$\overline{ea}$	$\overline{fg}$	∠OPQ
$\overline{CD}$	$\overline{IJ}$	$\overline{DU}$	$\overline{cm}$	$\overline{hi}$	∠RST
$\overline{EF}$	$\overline{KL}$	$\overline{XY}$	$\overline{bd}$		∠EVG





3 x 4 = 12

perimeter 14 units

area 12 units²

7 x 3 = 21

perimeter 20 units

area 21 units²

6 x 4 = 24

perimeter 20 units

area 24 units²

You gave the cashier $5.00 to buy a ball that was $3.21. What is your change? Color coins to count UP from $3.21 to $5.00

500 − 321 = 179

$5.00 = 500¢

$3.21 = 321¢

What number does A represent in each equation?

8 + A = 13 A = 5

5 + A = 12 A = 7

9 - A = 6 A = 3

A + 4 = 4 A = 0

18 - A = 9 A = 9

A + 5 = 16 A = 11

Find the missing numbers to complete each equation.

310 + 101 = 411

11 187 + 513 = 700

1 228 + 9 = 237

11 434 + 187 = 621

1 139 + 31 = 170

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

301 + X = 502 X= 201

X + 113 = 283 X= 170

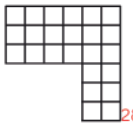
321 + X = 389 X= 68

X + 103 = 227 X= 124

1 114 + X = 350 X= 236

Date _____

Can you divide this shape into two separate rectangles? Outline and color them.



perimeter 24 units

area 24 units²

Draw the first rectangle here.

length 6 units

width 3 units

perimeter 18 units

area 18 units²

Draw the second rectangle here.

length 3 units

width 2 units

perimeter 10 units

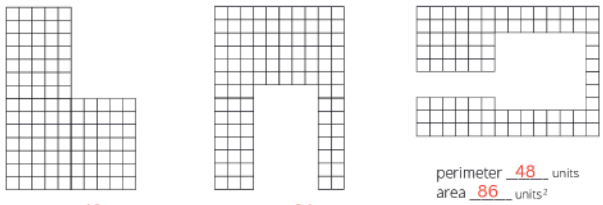
area 6 units²

28 add these

add these

because some of the perimeter lines overlap in the large shape

Could you have divided the shape into DIFFERENT rectangles? Would you have gotten the same answer?



perimeter 48 units

area 105 units²

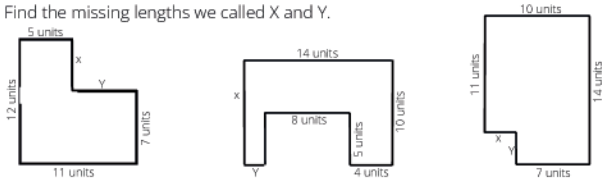
perimeter 64 units

area 100 units²

perimeter 48 units

area 86 units²

Find the missing lengths we called X and Y.



X = 5 Y = 6

perimeter 46 units

area 102 units²

X = 10 Y = 2

perimeter 58 units

area 100 units²

X = 3 Y = 3

perimeter 48 units

area 131 units²

Word Form	Expanded	Standard
Two hundred twelve	200+10+2	212
Five hundred one	500+1	501
Six hundred eighty	600 + 80	680
Two hundred thirty-two	200 + 30 + 2	232
One hundred ninety	100 + 90	190
Three hundred fifty-six	300+50+6	356
Five hundred twenty	500 + 20	520
Six hundred	600	600
One hundred eighty-seven	100 + 80 + 7	187
Four hundred forty-nine	400+40+9	449

Fill in the missing spots.

Which number is the largest?

680

Which number is the smallest?

190

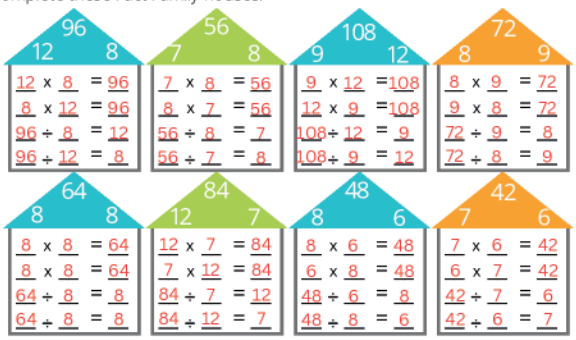
Which numbers have all even digits?

680, 600

Which number has zero tens and zero ones?

600

Complete these Fact Family houses.



Find the squares.

2^2 = 4

3^2 = 9

4^2 = 16

5^2 = 25

6^2 = 36

7^2 = 49

8^2 = 64

9^2 = 81

Find the positive square roots.

$\sqrt{16}$ = 4

$\sqrt{81}$ = 9

$\sqrt{36}$ = 6

$\sqrt{64}$ = 8

$\sqrt{25}$ = 5

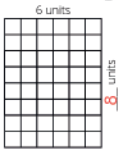
$\sqrt{1}$ = 1

$\sqrt{4}$ = 2

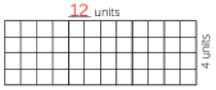
$\sqrt{49}$ = 7

Date _____

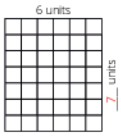
Find the missing dimensions.



length = 6 units
width = 8 units
perimeter = 28 units
area = 48 units²



length = 12 units
width = 4 units
perimeter = 32 units
area = 48 units²



length = 6 units
width = 7 units
perimeter = 26 units
area = 42 units²

length = 10 units
width = 7 units
perimeter = 34 units
area = 70 units²

length = 6 units
width = 9 units
perimeter = 30 units
area = 54 units²

(Length and width are interchangeable due to the Commutative property of multiplication)

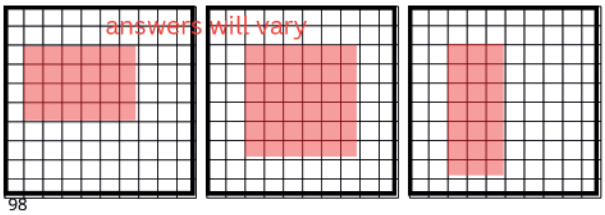
length = 9 units
width = 9 units
perimeter = 36 units
area = 81 units²

Draw rectangles with the following areas:

24 units²

36 units²

21 units²



Use mental math to find the sum of each problem.

Problem	Decompose	Rearrange	Sum
43 + 25	(40 + 3)+(20 + 5)	(40 + 20)+(3 + 5)	68
36 + 13	(30 + 6)+(10 + 3)	(30 + 10)+(6 + 3)	49
24 + 34	(20 + 4) + (30 + 4)	(20 + 30) + (4 + 4)	58
45 + 42	(40 + 5) + (40 + 2)	(40 + 40) + (5 + 2)	87
51 + 28	(50 + 1) + (20 + 8)	(50 + 20) + (1 + 8)	79

Add mentally.

55 + 23 = 78

41 + 21 = 62

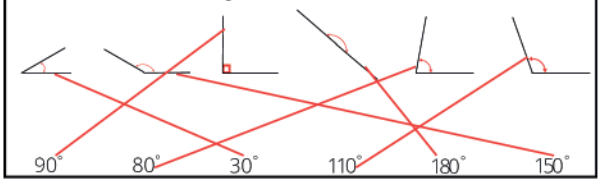
16 + 62 = 78

21 + 28 = 49

53 + 45 = 98

32 + 54 = 86

Draw lines to match each angle to the most correct measure.



How much money is this?

$6.26 dollars cents

$2.71 dollars cents

$11.84 dollars cents

$21.85 dollars cents

$20.31 dollars cents

Round each amount above to the nearest dollar.

$6 dollars

$3 dollars

$12 dollars

$22 dollars

$20 dollars

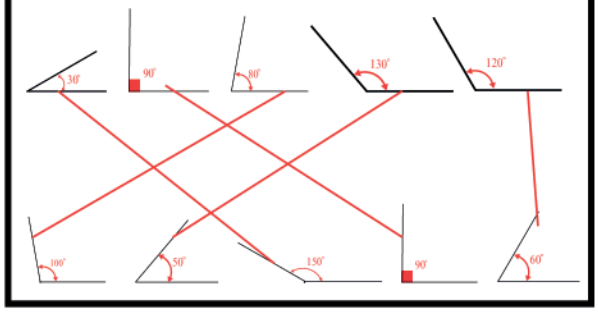
What comes next?

12, 24, 36, 48, 60, 72, 84, 96, 108, 120, 132, 144

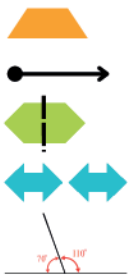
120, 110, 100, 90, 80, 70, 60, 50, 40, 30, 20, 10

Date _____

Draw lines to match each angle from the top row with its SUPPLEMENTAL angle on the bottom row. The two angles should add up to 180 degrees.



Draw lines to match the terms to the correct picture, then write each term.



congruent

symmetry

supplementary angles

trapezoid

ray

Why can't you measure the length of a line? _____

Line segments have a beginning and end, but lines do not.

Draw lines to match terms.

indeterminate — $\frac{0}{0}$

mixed number — $1\frac{1}{2}$

0 — $\frac{0}{1}$

undefined — $\frac{1}{0}$

whole number — 2

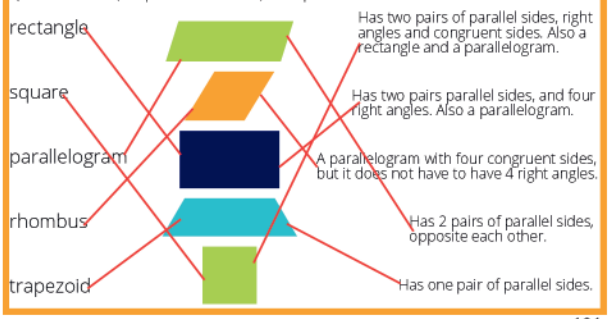
1 — $\frac{1}{1}$

Use your FRACTION CIRCLES to compare these fractions by drawing the correct comparison symbol (<, >, =) between them.

$\frac{1}{4} > \frac{1}{5}$ $\quad \frac{1}{2} = \frac{4}{8}$ $\quad \frac{3}{6} = \frac{5}{10}$ $\quad \frac{1}{3} < \frac{2}{3}$

$\frac{3}{5} < \frac{4}{5}$ $\quad \frac{6}{12} = \frac{2}{4}$ $\quad \frac{3}{4} = \frac{6}{8}$ $\quad \frac{4}{6} < \frac{4}{5}$

Quadrilaterals (shapes with 4 sides) are special! Draw lines to match columns.



rectangle — Has two pairs of parallel sides, right angles and congruent sides. Also a rectangle and a parallelogram.

square — Has two pairs parallel sides, and four right angles. Also a parallelogram.

parallelogram — A parallelogram with four congruent sides, but it does not have to have 4 right angles.

rhombus — Has 2 pairs of parallel sides, opposite each other.

trapezoid — Has one pair of parallel sides.

Date _____

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

Word Form	Expanded Form	Standard Form
Four thousand, one hundred fifty-seven	4,000+100+50+7	4,157
Twenty-one thousand, one hundred three	20,000+1,000+100+3	21,103
Seventy-seven thousand, forty-two	70,000 + 7,000 + 40 + 2	77,042
Eight thousand nineteen	8,000+10+9	8,019
Thirty-five thousand, nine hundred	30,000+5,000+900	35,900
Forty thousand, one hundred fifty-seven	40,000 + 100 + 50 + 7	40,157
Four hundred eleven thousand	400,000+10,000+1,000	411,000
One million, eighty thousand five	1,000,000 + 80,000 + 5	1,080,005
Twenty-five million, twenty-five	20,000,000+5,000,000+20+5	25,000,025
Seven million, seventy-seven	7,000,000 + 70 + 7	7,000,077

Your flight leaves at 11:15. The flight will take 6 hours 30 minutes. What time will you arrive (in 24-hour time)? Draw the hands on the clocks.

time	hours	minutes
11:15		45
12:00	5	
17:00		+ 45
17:45		15 hours

Convert each time from 12-hour format to 24-hour format.

12:15 PM = 12:15 $\quad$ 1:07 AM = 01:07

7:36 AM = 07:36 $\quad$ 10:28 PM = 22:28

9:01 PM = 21:01 $\quad$ 4:20 PM = 16:20

add 12 HOURS to all PM times 1:00PM or later.

Convert each time from 24-hour format to 12-hour format. Include A.M or P.M.

02:22 = 2:22 AM	11:02 = 11:02 AM	14:49 = 2:49 PM
07:56 = 7:56 AM	19:23 = 7:23 PM	20:09 = 8:09 PM
23:59 = 11:59 PM	17:30 = 5:30 PM	03:17 = 3:17 AM
10:00 = 10 AM	13:31 = 1:31 PM	16:50 = 4:50 PM

Write straight, right, acute, reflex or obtuse below each angle.

right angle — acute angle — straight angle — obtuse angle — reflex angle

Draw a dot inside each angle. Count the numbers of angles in each shape.

3 angles — 4 angles — 5 angles — 4 angles — 0 angles

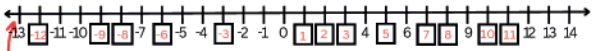
What comes next? hint: think exponents

1, 4, 9, 16, 25, 36, 49, 64, 81, 100, 121, 144

96, 88, 80, 72, 64, 56, 48, 40, 32, 24, 16, 8

Date _____

Fill in the missing numbers to complete the number line.



Is this a line, a line segment or a ray? A line

How do you know? No endpoints

Draw an infinity sign to the right of the line and a negative infinity sign to the left.

What do the arrows on either end of a LINE mean? That the line continues.

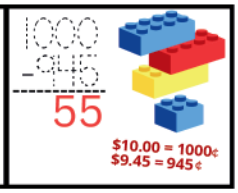
Draw:

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

Write each number, then name them out loud to a parent.

1. 10,000 + 6,000 + 700 + 50 + 3 = 16,753
2. 70,000 + 7 = 70,007
3. 40,000 + 100 + 50 + 7 = 40,157
4. 10,000 + 3,000 + 700 + 20 = 12,720
5. 9,000,000 + 4,000 + 10 + 1 = 9,004,011
6. 1,000,000 + 700,000 + 50,000 + 2,000 + 90 = 1,752,090
6. 4,000,000 + 300,000 + 2,000 + 900 + 1 = 4,302,901

You gave the cashier $10.00 to buy blocks that cost $9.45. What is your change? Color coins to count UP from $9.45 to $10.00



Convert these time periods:

1 year = 365 days

1 day = 24 hours

1 hour = 60 minutes

1 minute = 60 seconds

7 days = 1 week

30 hours = 1 day 6 hours

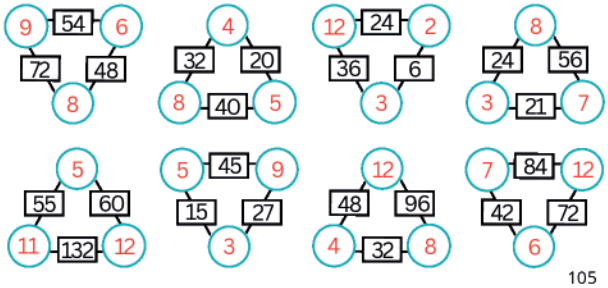
14 days = 2 weeks

120 minutes = 2 hours

360 seconds = 6 minutes

6 months = 1/2 year

The numbers in the rectangles are the PRODUCTS of the factors in the circles, at the VERTICES of the triangle. Find the missing factors.



105

Date _____

Use the number lines to solve each problem.

15 + 7 = 22

12 - 8 = 4

4 x 3 = 12

3 x 7 = 21

10 - 11 = -1

6 - 9 = -3

12 - 15 = -3

4 - 8 = -4

3 - 8 = -5

3 - 10 = -7

5 - 9 = -4

11 - 16 = -5

Do you notice any patterns in the subtraction problems above? _____

they're all negative because the minuend is less than the subtrahend

Use the number line from your lesson today to solve these story problems.

You have $20.00. You want to buy a $35 game. How much money do you need to earn?

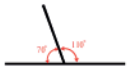
$15.00

At noon the temperature was 25 degrees. Overnight, the temperature dropped 37 degrees. What was the lowest temperature?

-12 degrees

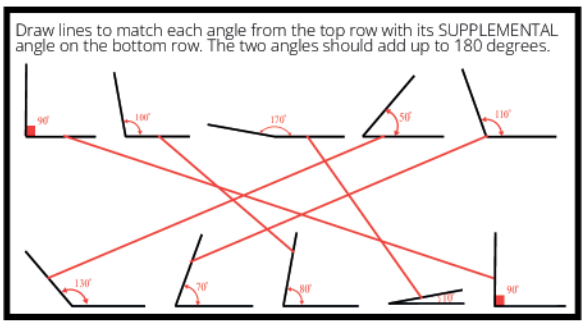
106

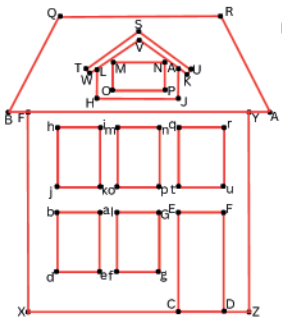
When two angles add to 180°, we say they are SUPPLEMENTARY. Supplement comes from Latin supplere, to complete or "supply" what is needed.



supplementary angles

Draw lines to match each angle from the top row with its SUPPLEMENTAL angle on the bottom row. The two angles should add up to 180 degrees.





Use a ruler to draw the following:

1. $\overline{XZ}$
2. $\overline{YZ}$
3. $\overline{FX}$
4. $\overline{QR}$
5. $\overline{QB}$
6. $\overline{RA}$
7. $\overline{BF}$
8. $\overline{YA}$
9. $\overline{ST}$
10. $\overline{SU}$
11. $\overline{hi}$
12. $\overline{VW}$
13. $\overline{VR}$
14. $\overline{AJ}$
15. $\overline{NP}$
16. $\overline{MO}$
17. $\overline{MN}$
18. $\overline{OP}$
19. $\overline{HJ}$
20. $\overline{LH}$
21. $\overline{TW}$
22. $\overline{JK}$
23. $\overline{UK}$
24. $\overline{ru}$
25. $\overline{qt}$
26. $\overline{qr}$
27. $\overline{tu}$
28. $\overline{EF}$
29. $\overline{EC}$
30. $\overline{FD}$
31. $\overline{mn}$
32. $\overline{op}$
33. $\overline{ba}$
34. $\overline{mo}$
35. $\overline{np}$
36. $\overline{TG}$
37. $\overline{fg}$
38. $\overline{ff}$
39. $\overline{Gg}$
40. $\overline{hj}$
41. $\overline{ik}$
42. $\overline{bd}$
44. $\overline{ae}$
45. $\overline{de}$

107

Date _____

Use your newest number line to find the sum/difference of each problem.

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

5 - 12 = -7

7 + -9 = -2

8 - -3 = 11

-3 - 12 = -15

-5 - 4 = -9

9 - 14 = -5

1 + -4 = -3

8 - -8 = 0

15 - 18 = -3

1 - -4 = 5

-4 - -11 = 7

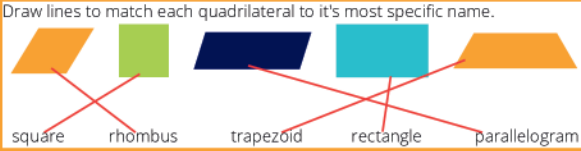
6 + 3 = 9

-1 - -4 = 3

1 - 10 = -9

6 - -3 = 9

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



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

5 x 2 = 10

3 x 4 = 12

9 x 8 = 72

5 x 3 = 15

6 x 5 = 30

8 x 7 = 56

2 x 12 = 24

6 x 8 = 48

4 x 8 = 32

Find the value of the letter in each number sentence.

5 x M = 20 M = 4

A x 3 = 30 A = 10

5 x T = 40 T = 8

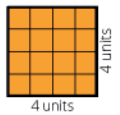
B x 6 = 36 B = 6

Y x 7 = 49 Y = 7

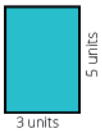
7 x S = 42 S = 6

108

Find the perimeter and the area of each shape.



4 x 4 = 16
perimeter 16 units
area 16 units²

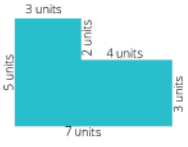


3 x 5 = 15
perimeter 16 units
area 15 units²

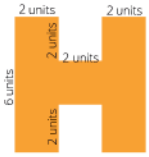
See what I did there? Commutative property of multiplication

5 x 3 = 15
perimeter 16 units
area 15 units²

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.



7 x 3 = 21
3 x 2 = 6
perimeter 24 units
area 27 units²



6 x 2 = 12
2 x 2 = 4
6 x 2 = 12
perimeter 32 units
area 28 units²

7 x 3 = 21
3 x 2 = 6
perimeter 24 units
area 27 units²

What comes before and after these numbers? Finish the patterns.

96, 88, 80, 72, 64, 56, 48, 40, 32, 24, 16, 8

144, 121, 100, 81, 64, 49, 36, 25, 16, 9, 4, 1

4, 14, 21, 28, 35, 42, 49, 56, 63, 70, 77, 84

6, 12, 18, 24, 30, 36, 42, 48, 54, 60, 66, 72

Date _____

What comes next? Ready, set, go!

17, 18, 15, 16, 13, 14, 11, 12, 9, 10
describe the rule: Add one, subtract three.

1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144
describe the rule: Add the previous two numbers.

1, 2, 4, 7, 11, 16, 22, 29, 37, 46, 56
(+1, +2, +3, +4, +5, +6)
describe the rule: Start with +1, add one more each time.

Create your own pattern:
____, ____, ____, ____, ____, ____, ____, ____, ____
describe the rule:

ANSWERS WILL VARY

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

5 x 4 = 20
3 x 2 = 6
2 x 5 = 10
3 x 7 = 21
8 x 4 = 32
7 x 8 = 56
6 x 8 = 48

Find the value of the VARIABLE in each number sentence.

5A = 20 → A = 4
3B = 6 → B = 2
2C = 10 → C = 5
3X = 21 → X = 7
8Y = 32 → Y = 4
7Z = 56 → Z = 8
6T = 48 → T = 8

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

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

FUNCTION MACHINE

Send each number from the IN column through the function machine. Figure out the rule for each function and complete the OUT column of the function table.

rule: 2x

IN	OUT
1	2
2	4
3	6
4	8
5	10
6	12

rule: x+3

IN	OUT
1	4
2	5
3	6
4	7
5	8
6	9

rule: x 0

IN	OUT
1	0
2	0
3	0
4	0
5	0
6	0

rule: x 3

IN	OUT
1	3
2	6
3	9
4	12
5	15
6	18

rule: x-1

IN	OUT
1	0
2	1
3	2
4	3
5	4
6	5

rule: x/2

IN	OUT
1	1/2
2	1
3	3/2
4	2
5	5/2
6	3
7	7/2
8	4
9	9/2
10	5

rule: x^2

IN	OUT
1	1
2	4
3	9
4	16
5	25
6	36
7	49
8	64
9	81
10	100

rule: x-5

IN	OUT
1	-4
2	-3
3	-2
4	-1
5	0
6	1
7	2
8	3
9	4
10	5

rule: x 8

IN	OUT
1	8
2	16
3	24
4	32
5	40
6	48
7	56
8	64
9	72
10	80

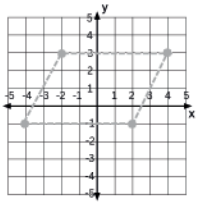
Create your own rule:

IN	OUT

ANSWERS WILL VARY

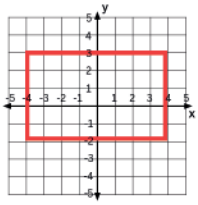
Date _____

Let's draw quadrilaterals. Graph the points listed below each coordinate plane, then connect the dots in the order they are given.



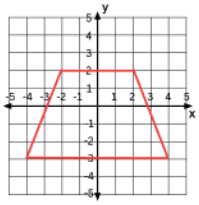
1.(-4, -1) 3.(4, 3)
2.(2, -1) 4.(-2, 3)

Shape name: parallelogram



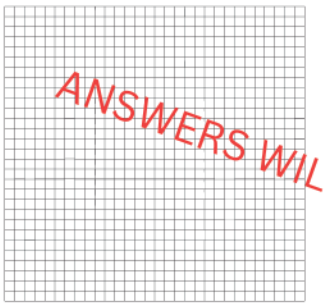
1.(4, -2) 3.(-4, 2)
2.(4, 2) 4.(-4, -2)

Shape name: rectangle



1.(-4, -3) 3.(2, 2)
2.(4, -3) 4.(-2, 2)

Shape name: trapezoid



ANSWERS WILL VARY

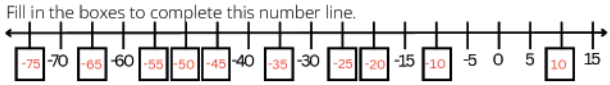
Coordinate Plane

Draw and label:
- x-axis
- y-axis
- origin
- label the quadrants 1, 2, 3, 4

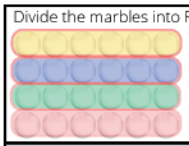
Draw a HEXAGON. Label each angle A, B, C, D, E and F. Write the ordered pair for each angle below:

A _____ D _____
B _____ E _____
C _____ F _____

Fill in the boxes to complete this number line.



Divide the marbles into FOUR equal groups. Color each group a different color.

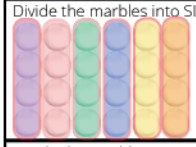


What is 1/4 of 24? 6 What is 3/4 of 24? 18

What is 2/4 of 24? 12 What is 4/4 of 24 24

Which fraction is HALF of the marbles? 12/24

Divide the marbles into SIX equal groups. Color each group a different color.



What is 1/6 of 24? 4 What is 4/6 of 24? 16

What is 2/6 of 24? 8 What is 5/6 of 24 20

What is 3/6 of 24? 12 What is 6/6 of 24? 24

Which fraction is HALF of the marbles? 12/24

Divide the marbles into EIGHT equal groups. Color each group a different color.

What is 1/8 of 24? 3 What is 5/8 of 24? 15

What is 2/8 of 24? 6 What is 6/8 of 24? 18

What is 3/8 of 24? 9 What is 7/8 of 24? 21

What is 4/8 of 24? 12 What is 8/8 of 24? 24

Divide the marbles into TWELVE equal groups. Color each group a different color.

What is 1/12 of 24? 2 What is 7/12 of 24? 14

What is 2/12 of 24? 4 What is 8/12 of 24? 16

What is 3/12 of 24? 6 What is 9/12 of 24? 18

What is 4/12 of 24? 8 What is 10/12 of 24? 20

What is 5/12 of 24? 10 What is 11/12 of 24? 22

What is 6/12 of 24? 12 What is 12/12 of 24? 24

Draw least 3 more polygons to complete this pattern. You may draw REGULAR or IRREGULAR polygons. Label each polygon with its name.

rule: each polygon has one side more

Date _____

Each square on the map is TWO SQUARE FEET. Most animals take up more than one square, so please approximate the coordinates as best you can.

1. Name the animal at each coordinate on the opposite page:

(-10, 14) bear (7, -6) orangutan

(-9, 21) zebra (9, 14) parrot

(-3, 17) giraffe (-5, 5) gorilla

(-14, 10) polar bear (-15, -4) seal

(-17, 4) penguin (12, -13) lion

2. Write the approximate coordinates of these animals on the zoo map:

3. The rhinos need shade. Draw three trees in the rhino enclosure and list their coordinates here:

answers will vary

4. The Snack Shack and the Restroom are the same size. How many square feet is each building if each square is 2 ft²?

14 (length) x 10 (width) = 140 ft² (area)

(Because each square is two square feet, after you count the length of a side, multiply it by two.)

5. Draw a path from the zebras to the restrooms. How many feet is the path?

answers will vary

6. List the coordinates of all of the benches:

(-13, 18) (13, 12)

(-5, 18) (13, -2)

(-10, 11) (1, -9)

(4, 21) (-14, -13)

7. List the coordinates of all of the emergency exit signs:

(-12, -6)

(13, -1)

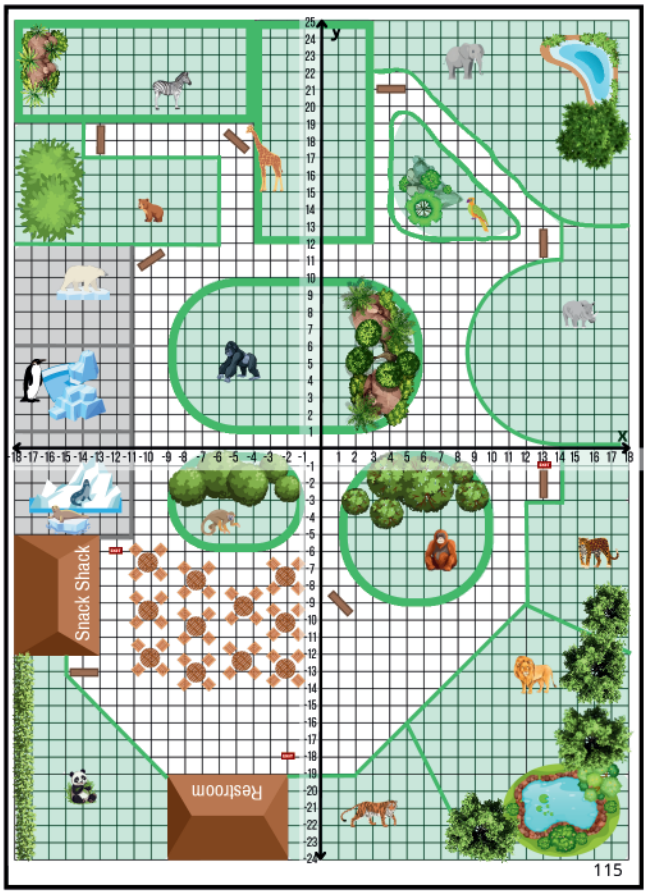
(-2, -18)

KEY

bench

table

EXIT emergency exit



Date _____

Problem	Expanded Form	Separate	Decompose	Add products
2 x 43	2 x (40 + 3)	2 x 40 2 x 3	2 x 4 x 10 2 x 3	80 + 6 86
6 x 26	6 x (20 + 6)	6 x 20 6 x 6	6 x 2 x 10 6 x 6	120 + 36 156
3 x 59	3 x (50 + 9)	3 x 50 3 x 9	3 x 5 x 10 3 x 9	150 + 27 177
8 x 67	8 x (60 + 7)	8 x 60 8 x 7	8 x 6 x 10 8 x 7	480 + 56 536
4 x 753	4 x (700 + 50 + 3)	4 x 700 4 x 50 4 x 3	4 x 7 x 100 4 x 5 x 10 4 x 3	2800 200 + 12 3012
7 x 468	7 x (400 + 60 + 8)	7 x 400 7 x 60 7 x 8	7 x 4 x 100 7 x 6 x 10 7 x 8	2800 420 + 56 3276
5 x 274	5 x (200 + 70 + 4)	5 x 200 5 x 70 5 x 4	5 x 2 x 100 5 x 7 x 10 5 x 4	1000 350 + 20 1370
2 x 363	2 x (300 + 60 + 3)	2 x 300 2 x 60 2 x 3	2 x 3 x 100 2 x 6 x 10 2 x 3	600 120 + 6 726

A VARIABLE represents a number.
A COEFFICIENT is a number that precedes and is multiplied by a variable in a number sentence.

coefficient variable

$5A = 20$ $A = 4$

Trace each term then write it twice more.

variable

coefficient

Find the value of the VARIABLE in each number sentence.

3A = 21	A = 7	12 - D = 10	D = 2
X + 3 = 12	X = 9	3T = 24	T = 8
12/F = 3	F = 4	6C = 48	C = 8
15 - Z = 9	Z = 6	8X = 72	X = 9
8Y = 56	Y = 7	7S = 42	Y = 6

Send each number from the IN column through the function machine. Figure out the rule for each function and complete the OUT column of the function table.

Rule: 3x

IN	OUT
1	3
5	15
3	9
7	21
2	6
8	24

Rule: x-5

IN	OUT
8	3
2	-3
3	-2
9	4
5	0
7	2

Rule: x/2

IN	OUT
10	5
4	2
8	4
2	1
12	6
6	3

Rule: x+10

IN	OUT
3	13
5	15
7	17
11	21
8	18
6	16

Rule: x 10

IN	OUT
1	10
2	20
9	90
5	50
7	70
8	80

Date _____

Problem	Expanded Form	Separate	Decompose	Add products
3 x 634	3 x (600 + 30 + 4)	3 x 600 3 x 30 3 x 4	3 x 6 x 100 3 x 3 x 10 3 x 4	1800 90 + 12 1902
9 x 475	9 x (400 + 70 + 5)	9 x 400 9 x 70 9 x 5	9 x 4 x 100 9 x 7 x 10 9 x 5	3600 630 + 45 4275
2 x 697	2 x (600 + 90 + 7)	2 x 600 2 x 90 2 x 7	2 x 6 x 100 2 x 9 x 10 2 x 7	1200 180 + 14 1394
4 x 2451	4 x (2000 + 400 + 50 + 1)	4 x 2000 4 x 400 4 x 50 4 x 1	4 x 2 x 1000 4 x 4 x 100 4 x 5 x 10 4 x 1	8000 1600 200 + 4 9804
8 x 2643	8 x (2000 + 600 + 40 + 3)	8 x 2000 8 x 600 8 x 40 8 x 3	8 x 2 x 1000 8 x 6 x 100 8 x 4 x 10 8 x 3	16000 4800 320 + 24 21144
7 x 7343	7 x (7000 + 300 + 40 + 3)	7 x 7000 7 x 300 7 x 40 7 x 3	7 x 7 x 1000 7 x 3 x 100 7 x 4 x 10 7 x 3	49000 2100 280 + 21 51401
5 x 5866	5 x (5000 + 800 + 60 + 6)	5 x 5000 5 x 800 5 x 60 5 x 6	5 x 5 x 1000 5 x 8 x 100 5 x 6 x 10 5 x 6	25000 4000 300 + 30 29330

How long is your movie? Theater 12 Start 11:45 AM End 1:15 PM

time	hours	minutes
11:45 AM 12:00 1:00 1:15 PM	1	15 15

30 minutes

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

1 hours and 30 minutes

How long is your all-day water park pass good? OPEN 9:15 AM CLOSE 8:45 PM

time	hours	minutes
9:15 AM 10:00 noon 8:00 8:45 PM	2 8	45 45

90 minutes

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

11 hours and 30 minutes

Your party starts at 1:00 PM. It will take you 1 hour and 55 minutes to drive there. What time should you leave?

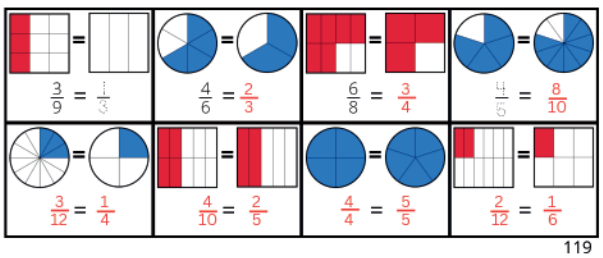
time	hours	minutes
11:05 1:00 PM		

Draw lines to match each month to the number of days it has.

How many days are between Christmas and Valentine's Day? 50

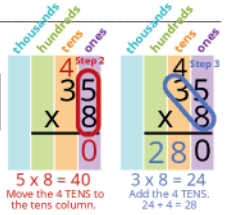
How many days are between Halloween and Christmas? 47

In each box, color the second shape so it's EQUIVALENT to the first fraction. Label each fraction.



Date _____

Multiplication Algorithm for 1-digit Multipliers:
1. Stack the numbers with the smaller number (the multiplier) on the bottom, lining up digits by place value.
2. Multiply the multiplier by the number in the ones place of the top number, writing the answer under the line. If the product of these two numbers is greater than nine, move the TEN over to the TENS PLACE.
3. Multiply the multiplier by EACH DIGIT in the top number until complete. Regroup where necessary.



Find the products.

70 x 2 = 140
4 x 2 = 8
add products

74 x 2 = 148

30 x 8 = 240
6 x 8 = 48
add products

36 x 8 = 288

85 x 6 = 510

34 x 2 = 68	86 x 7 = 602	78 x 8 = 624	63 x 4 = 252	45 x 9 = 405
31 x 3 = 93	67 x 6 = 402	53 x 8 = 424	97 x 5 = 485	46 x 3 = 138

1 foot = 12 inches | 1 yard = 3 feet | 1 mile = 5280 feet

Convert these US Customary units of length.

2 yards = 6 feet

12 feet = 4 yards

2 feet = 24 inches

36 inches = 1 yard

1 mile = 5280 feet

60 inches = 1 yard 2 feet

10 feet = 3 yards 12 inches

11 feet = 3 yards 2 feet

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

Word Form	Expanded Form	Standard Form
Two million, one hundred twenty-four thousand, eight hundred fifty-three	2,000,000 + 100,000 + 20,000 + 4,000 + 800 + 50 + 3	2,124,853
Two hundred ten million, one hundred one thousand	200,000,00 + 10,000,000 + 100,000 + 1,000	210,101,000
One million, nine thousand one	1,000,000 + 9,000 + 1	1,009,001
Seven trillion, one million	7,000,000,000 + 1,000,000	7,001,000,000
Three trillion, nine hundred fifty million, two hundred thirty-five	3,000,000,000 + 900,000,000 + 50,000,000 + 200 + 30 + 5	3,950,000,235
Twelve trillion, ten million, one thousand nine	10,000,000,000 + 2,000,000,000 + 10,000,000 + 1,000 + 9	12,010,001,009

Use your number line to find the sum/difference of each problem.

8 - 11 = -3
7 - 15 = -8
3 - -5 = 8
-3 + 5 = 2
2 - -4 = 6
-8 - -8 = 0
4 - 10 = -6
3 - 5 = -2
-1 - 11 = -12
12 + -2 = 10
-9 + -7 = -16
9 - -7 = 16

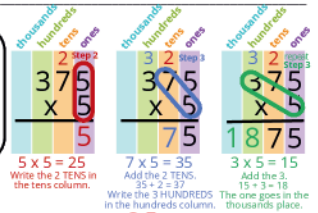
Use your FRACTION CIRCLES or FRACTION STRIPS to compare these fractions by drawing the correct comparison symbol (<, >, =) between them.

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

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

Date _____

Multiplication Algorithm for 1-digit Multipliers:
1. Stack the numbers with the smaller number (the multiplier) on the bottom, lining up digits by place value.
2. Multiply the multiplier by the number in the ones place of the top number, writing the answer under the line. If the product of these two numbers is greater than nine, move the TEN over to the TENS PLACE.
3. Multiply the multiplier by EACH DIGIT in the top number until complete. Regroup where necessary.



Find the products.

735 x 4 = 2940
700 x 4 = 2800
30 x 4 = 120
5 x 4 = 20
add products 2940

849 x 6 = 5094
800 x 6 = 4800
40 x 6 = 240
9 x 6 = 54
add products 5094

398 x 5 = 1990

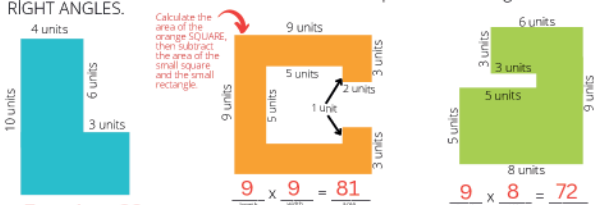
856 x 7 = 5992
364 x 8 = 2912
827 x 6 = 4962
256 x 4 = 1024
643 x 3 = 1929
284 x 9 = 2556
936 x 5 = 4680
478 x 4 = 1912
832 x 8 = 6656
598 x 7 = 4186

Use a ruler or a tape measure to measure the following items to the nearest 1/4 inch (use units!):

Your bed _____ A fork _____
Your table _____ A book _____
Your shoe _____ A door _____
A painting _____ A phone _____

ANSWERS WILL VARY

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.



7 x 4 = 28 (length x width = area)
6 x 4 = 24
perimeter 34 units
area 52 units²

9 x 9 = 81
5 x 5 = 25
2 x 3 = 6
perimeter 54 units
area 50 units²

9 x 8 = 72
3 x 1 = 3
4 x 2 = 8
perimeter 40 units
area 61 units²

Use circles to group the items, then complete the equations.

$\frac{12}{3} = 4$ $12 \div 3 = 4$ $3\overline{)12}$ (4) What is 1/3 of 12? 4

$\frac{12}{6} = 2$ $12 \div 6 = 2$ $6\overline{)12}$ (2) What is 1/6 of 12? 2

$\frac{12}{4} = 3$ $12 \div 4 = 3$ $4\overline{)12}$ (3) What is 1/4 of 12? 3

Find the answers:

$2^2 = 2 \times 2 = 4$
$2^3 = 2 \times 2 \times 2 = 8$
$2^4 = 2 \times 2 \times 2 \times 2 = 16$
$2^5 = 2 \times 2 \times 2 \times 2 \times 2 = 32$

$3^2 = 3 \times 3 = 9$
$3^3 = 3 \times 3 \times 3 = 27$
$3^4 = 3 \times 3 \times 3 \times 3 = 81$
$3^5 = 3 \times 3 \times 3 \times 3 \times 3 = 243$

Date _____

$3\overline{)25} = 8$ R 1
3 groups, each with 8 items, plus one leftover is 25 items.

21 ÷ 7 = 3 (dividend ÷ divisor = quotient)
$7\overline{)21} = 3$ (divisor $\overline{)}$ dividend = quotient)
$\frac{21}{7} = 3$ (dividend / divisor = quotient)

Find the quotients. Use remainder notation.

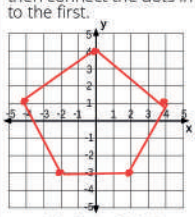
$2\overline{)10} = 5$ $3\overline{)12} = 4$ $5\overline{)25} = 5$ $3\overline{)24} = 8$ $2\overline{)11} = 5$ R 1
$3\overline{)26} = 8$ R 2 $4\overline{)16} = 4$ $6\overline{)19} = 3$ R 1 $5\overline{)16} = 3$ R 1 $6\overline{)25} = 4$ R 1
$2\overline{)19} = 9$ R 1 $3\overline{)11} = 3$ R 2 $4\overline{)30} = 7$ R 2 $7\overline{)50} = 7$ R 1 $9\overline{)20} = 2$ R 2

Find the products.

5132 x 4 = 20528
5000 x 4 = 20000
100 x 4 = 400
30 x 4 = 120
2 x 4 = 8
add products

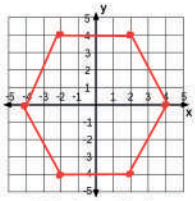
5423 x 3 = 16269
3213 x 3 = 9239
4751 x 7 = 33257
3222 x 4 = 12888
4827 x 5 = 24135
2431 x 2 = 4862
6844 x 2 = 13688
8739 x 6 = 52434
9832 x 3 = 29496
7368 x 5 = 36840

Let's draw polygons. Graph the points listed below each coordinate plane, then connect the dots in the order they are given. From the last point, return to the first.



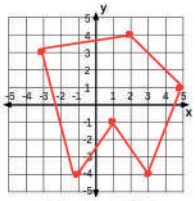
1.(2, -3) 3.(0, 4)
2.(4, 1) 4.(-4, 1)
5.(-2, -3)

Shape name: Pentagon



1.(-2, -4) 4.(2, 4)
2.(2, -4) 5.(-2, 4)
3.(4, 0) 6.(-4, 0)

Shape name: Hexagon



1.(-4, -1) 4.(5, 1)
2.(1, -1) 5.(2, 4)
3.(3, -4) 6.(-3, 3)

Shape name: Hexagon

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

45% = 45/100

19% = 19/100

25% = 25/100

73% = 73/100

38% = 38/100

71% = 71/100

Use circles to group the items, then complete the equations.

16/4 = 4 16 ÷ 4 = 4 4)16

What is 1/4 of 16? 4
What is 2/4 of 16? 8

16/8 = 2 16 ÷ 8 = 2 8)16

What is 1/8 of 16? 2
What is 4/8 of 16? 8

16/2 = 8 16 ÷ 2 = 8 2)16

What is 1/2 of 16? 8
What is 2/2 of 16? 16

Date _____

Divide.
Multiply.
Subtract.
Bring Down.
Repeat.

5)65 — No Remainder
3)66 — 22 — No Remainder 0
2)36 — 18 — No Remainder 2
4)96 — 24 — No Remainder 0

Find the quotients. These problems have remainders, but they follow the exact same pattern!

4)93 = 23 R 1
2)75 = 37 R 1
7)87 = 12 R 3
3)67 = 22 R 1
5)84 = 16 R 4
3)55 = 18 R 1
2)47 = 23 R 1
6)79 = 13 R 1
6)91 = 15 R 1
5)75 = 15 R 0
3)87 = 29 R 0
4)67 = 16 R 3

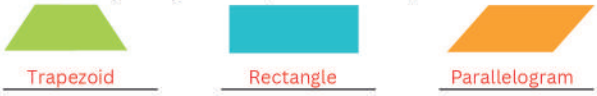
I'm thinking of a number between 20 and 30. The SUM of the 2 digits is 6.

What is my number? 24 What is the PRODUCT of the digits? 8

Find the positive square roots.

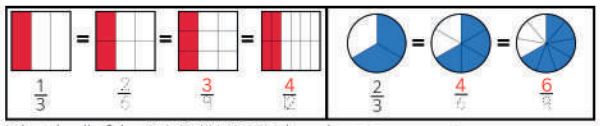
√16 = 4 √25 = 5 √36 = 6 √9 = 3
√81 = 9 √100 = 10 √64 = 8 √49 = 7

Draw lines of symmetry in each shape. Label each shape with its name.



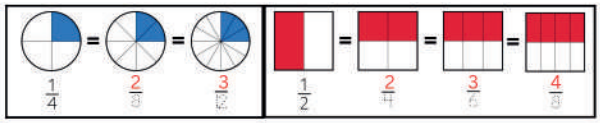
Trapezoid Rectangle Parallelogram

Color all of the remaining shapes so they are equivalent to the first shape in each box. Label each fraction.



1/3 = 2/6 = 3/9 = 4/12
2/3 = 4/6 = 6/9

What do all of the DENOMINATORS above have in common?



1/4 = 2/8 = 3/12
1/2 = 2/4 = 3/6 = 4/8

What do all of the DENOMINATORS above have in common?
they are each multiples of the first number

Use your number line to find the sum/difference of each problem.

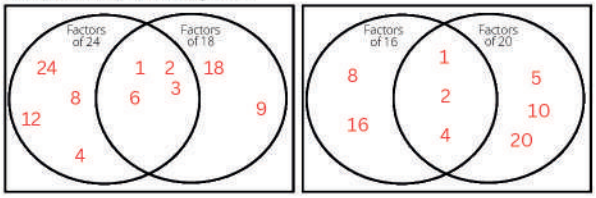
-7 - 4 = -11 1 - 2 = -1 4 + -5 = -1
5 - -7 = 12 4 - -5 = 9 3 - 10 = -7
10 + -2 = 8 -4 + 5 = 1 3 - 5 = -2
-2 + -7 = -9 8 - 13 = -5 -2 - -2 = 0

Date _____

Find the factors of each number. List them from the least to the greatest. Circle each of the prime numbers.

18: 1, 2, 3, 6, 9, 18
11: 1, 11
5: 1, 5
4: 1, 2, 4
20: 1, 2, 4, 5, 10, 20
9: 1, 3, 9
10: 1, 2, 5, 10
6: 1, 2, 3, 6

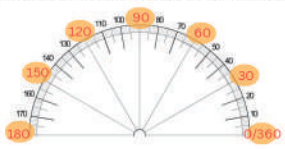
Complete these Venn Diagrams.

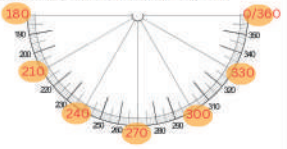


Find the quotients. Some have remainders and some don't.

3)87 = 29 R 0
2)49 = 24 R 1
5)78 = 15 R 3
6)74 = 12 R 2
4)96 = 24 R 0
3)99 = 33 R 0
7)85 = 12 R 1
2)81 = 40 R 1

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





All of the angles are RIGHT ANGLES. Find the missing dimensions. Add up the perimeter then find the AREA by subtraction. Multiply the overall length times the width of the LARGE shape, then subtract out the small shapes.

area of the large rectangle:

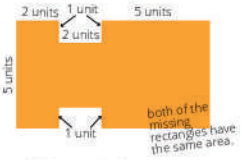
8 (length) x 5 (width) = 40 (area)

subtract the area of the missing square:

2 (length) x 2 (width) = 4 (area)

perimeter 26 units

area 36 units²



area of the large rectangle:

9 (length) x 5 (width) = 45 (area)

subtract the area of TWO missing rectangles:

DOUBLE the area of one missing rectangle.

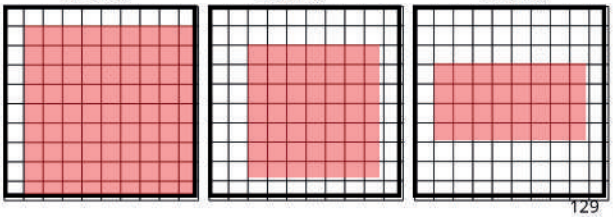
2 (length) x 1 (width) = 2 (area)

perimeter 28 units

area 41 units²

Draw rectangles with the following areas:

81 units² 49 units² 32 units²



Date _____

Oof! Three digit division! Just follow the same steps.

Divide.
Multiply.
Subtract.
Bring Down.
Repeat.

3) 4 9 5 → 1 1 R ☐ → 1 6 5 → Remainder 0

Check your division.

1 6 5 x 3 = 4 9 5

5) 7 2 5 → 1 4 5 R 0 → Remainder 0

Check your division.

1 4 5 x 5 = 7 2 5

3) 6 0 4 → 2 0 1 R 1 → Remainder 1

Check your division.

2 0 1 x 3 = 6 0 3

add the remainder 604

3) 3 1 7 → 1 0 5 R 2 → Remainder 2

Check your division.

1 0 5 x 3 = 3 1 5

add the remainder 317

2) 8 8 3 → 4 4 1 R 1 → Remainder 1

Check your division.

4 4 1 x 2 = 8 8 2

add the remainder 884

5) 7 4 9 → 1 4 9 R 4 → Remainder 4

Check your division.

1 4 9 x 5 = 7 4 5

add the remainder 749

Round each number to the nearest 10 and add the rounded numbers.

51 + 38 → 50 + 40 = 90

45 + 25 → 50 + 30 = 80

You gave the cashier $5.00 to buy a book that was $3.84. What is your change? Color coins to count UP from $3.84 to $5.00

500
-384
116

$5.00 = 500¢
$3.84 = 384¢

You gave the cashier $5.00 to buy 3 tubes of paint for $1.49 each. What is your change? Color coins to count UP.

500
-47
53

How much money is this?

$10.75 dollars cents

$16.22 dollars cents

$30.69 dollars cents

$12.01 dollars cents

$10.25 dollars cents

Round each amount above to the nearest dollar.

$ ___ dollars

$ 16 dollars

$ 31 dollars

$ 12 dollars

$ 10 dollars

List the months with 31 days. What fractional part of the year is this? _____

January, March, May, July, August, October, December. 7/12

Date _____

Yikes! FOUR digits? Just follow the same pattern.

Divide.
Multiply.
Subtract.
Bring Down.
Repeat.

4) 7 1 4 9 → 1 7 8 7 R 1 → Remainder 1

Check your division.

1 7 8 7 x 4 = 7 1 4 8

add the remainder 7149

2) 1 8 8 3 → 0 9 4 1 R 1 → Remainder 1

Check your division.

9 4 1 x 2 = 1 8 8 2

add the remainder 1883

5) 2 5 7 → 0 5 1 R 2 → Remainder 2

9) 8 1 1 → 0 9 0 R 1 → Remainder 1

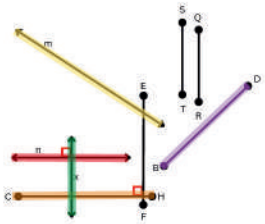
7) 5 1 4 → 0 7 3 R 3 → Remainder 3

6) 5 0 7 → 0 8 4 R 3 → Remainder 3

3) 6 5 3 2 → 2 1 7 7 R 1 → Remainder 1

8) 5 0 1 9 → 0 6 2 7 R 3 → Remainder 3

4) 8 5 1 1 → 2 1 2 7 R 3 → Remainder 3



1. Trace the horizontal LINE red.
2. Trace the horizontal LINE SEGMENT orange.
3. Trace the vertical LINE green.
4. Trace the oblique LINE yellow.
5. Name the two perpendicular line segments: $\overline{EF}$ and $\overline{CH}$
6. Trace line segment $\overline{BD}$ purple.
7. Name the two parallel line SEGMENTS: $\overline{ST}$ and $\overline{QR}$

What fraction of this whole candy bar is one piece? 1/8

What fraction is half of this candy bar? 4/8

What fraction of this whole candy bar is one piece? 1/9

How many pieces is one third? 3

What fraction of this whole candy bar is one piece? 1/18

What fraction is half of this candy bar? 9/18

What fraction of this whole candy bar is one piece? 1/12

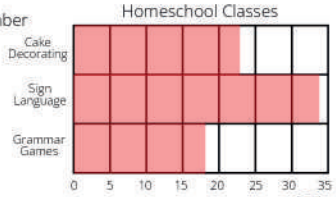
How many pieces is one fourth? 3

Draw a bar graph to show the number of children in each class:

Cake decorating: 23 children

Sign Language: 34 children

Grammar Games: 18 children



Date _____

You are making holiday cards for your family. Each card has three trees on the front. You have 87 trees. How many cards can you make?

3 trees = 1 card
30 trees = 10 cards

trees	cards
87	20
-60	
27	9
-27	
0	

How many times can you subtract 30?

How many times can you subtract 3?

$3\overline{)87}$ → 29, R 0

$8\overline{)755}$ → 094, R 3

$6\overline{)4128}$ → 0688, R 0

$5\overline{)7812}$ → 1562, R 2

$9\overline{)4357}$ → 0484, R 1

Show 4 ways to make 69¢.

				total coins
	6		9	15
2	1	1	4	8
			69	69
	6	1	4	11

Show 4 ways to make 58¢.

				total coins
2		1	3	6
2			8	10
	5	1	3	9
1	3		3	7

Show 4 ways to make 85¢.

				total coins
3		1		4
3			5	8
	8	1		9
	8		5	13

ANSWERS MAY VARY

You are building toy cars. Each car needs 4 wheels. If you have a big box with 940 wheels, how many cars can you build?

4 wheels = 1 car
40 wheels = 10 cars
400 wheels = 100 cars

wheels	cars
940	200
-800	
140	30
-120	
20	5
-20	
0	

How many times can you subtract 400?

How many times can you subtract 40?

How many times can you subtract 4?

$4\overline{)940}$ → 235

$3\overline{)19274}$ → 06421

$2\overline{)82466}$ → 41233, R 0

$5\overline{)31572}$ → 06315, R 2

$3\overline{)28654}$ → 09542, R 2

Find the products.

7347 x 2 = 14694	3762 x 6 = 22572	4738 x 4 = 18952	8273 x 3 = 24819	1394 x 8 = 11152
1483 x 8 = 11864	2893 x 5 = 14465	1019 x 9 = 9171	6381 x 4 = 25524	2973 x 7 = 20811

Date _____

Order these fractions from least to greatest. (All of the numerators are one!)

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

$\frac{1}{12}$ $\frac{1}{10}$ $\frac{1}{11}$ $\frac{1}{8}$ $\frac{1}{6}$ → $\frac{1}{12}$ $\frac{1}{11}$ $\frac{1}{10}$ $\frac{1}{8}$ $\frac{1}{6}$

Write a comparison symbol between each pair of fractions. Use your fraction circles if you need to. (All of the numerators are one!)

$\frac{1}{5} > \frac{1}{6}$ $\frac{1}{2} > \frac{1}{7}$ $\frac{1}{10} < \frac{1}{9}$ $\frac{1}{7} = \frac{1}{7}$

$\frac{1}{3} < \frac{1}{1}$ $\frac{1}{4} > \frac{1}{8}$ $\frac{1}{2} > \frac{1}{11}$ $\frac{1}{5} < \frac{1}{4}$

Write a comparison symbol between each pair of fractions. Use your fraction circles if you need to. (The denominators in each pair are the same!)

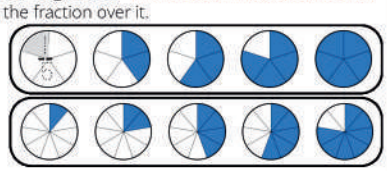
$\frac{2}{5} < \frac{3}{5}$ $\frac{7}{8} > \frac{2}{8}$ $\frac{2}{4} < \frac{5}{4}$ $\frac{3}{6} < \frac{4}{6}$

$\frac{1}{3} < \frac{2}{3}$ $\frac{1}{7} < \frac{6}{7}$ $\frac{3}{12} > \frac{1}{12}$ $\frac{5}{9} > \frac{4}{9}$

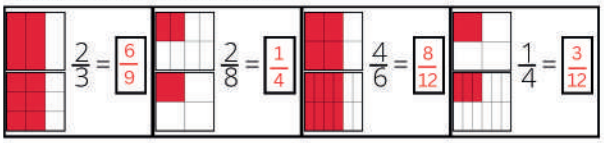
Order these fractions from least to greatest. (All of the denominators are the same!)
Color the fraction then write the fraction over it.

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

$\frac{2}{9}$ $\frac{1}{9}$ $\frac{7}{9}$ $\frac{4}{9}$ $\frac{5}{9}$



Color pieces of each bottom shape so it matches the top shape. Then write each equivalent fractions number sentence.



Use the Butterfly Method to find the missing digits.

2x6=12 4x3=12

$\frac{2}{4} = \frac{3}{6}$ $\frac{4}{6} = \frac{6}{9}$

3x8=24 4x?=24

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

$\frac{8}{12} = \frac{4}{6}$ $\frac{2}{5} = \frac{4}{10}$

$\frac{3}{5} = \frac{6}{10}$ $\frac{3}{7} = \frac{6}{14}$

3) 8 9 1 = 297 R 0 (Remainder 0)

2) 5 3 8 9 = 2694 R 1 (Remainder 1)

7) 3 7 7 0 = 0538 R 4 (Remainder 4)

Multiply the QUOTIENT and divisor from each problem above to check your division.

297 ← quotient × 3 ← divisor = 891

add the remainder 891

2694 × 2 = 5388

add the remainder 5389

538 × 7 = 3766

add the remainder 3770

Date _____

List the first ten multiples of:

3, 6, 9, 12, 15, 18, 21, 24, 27, 30

4, 8, 12, 16, 20, 24, 28, 32, 36, 40

5, 10, 15, 20, 25, 30, 35, 40, 45, 50

6, 12, 18, 24, 30, 36, 42, 48, 54, 60

Name two common multiples of 3 and 4.

12, 24

Name three common multiples of 3 and 6.

12, 18, 24

What is the LEAST common multiple of 3 and 6? 6

What is the LEAST common multiple of 3 and 5? 15

What is the LEAST common multiple of 5 and 6? 30

What is the LEAST common multiple of 4 and 3? 12

Find the least common denominator of each pair of fractions

$\frac{2}{3}$ and $\frac{1}{6}$ LCD 6

$\frac{3}{5}$ and $\frac{2}{4}$ LCD 20

$\frac{4}{6}$ and $\frac{5}{5}$ LCD 30

$\frac{1}{3}$ and $\frac{3}{4}$ LCD 12

Rewrite each fraction in each pair above with the LCD. Write the correct comparison symbol between them.

compare

$\frac{20}{30} < \frac{30}{30}$

$\frac{4}{12} < \frac{9}{12}$

What if you have TWO chocolate bars? Each has twelve pieces. How many pieces do you have? 24

$\frac{24}{2} = 12$ improper fraction

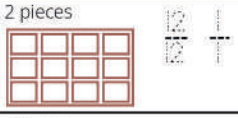
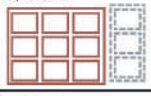
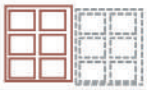
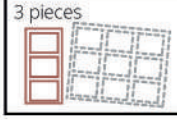
$24 \div 2 = 12$ $2\overline{)24}^{12}$

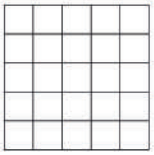
Improper fractions have a larger numerator than denominator. Write them as a whole number or mixed number instead.

If you shared these two chocolate bars between four people, how many pieces would each person get? 6 What fraction is that? 6/24 which equals 1/4

Name That Fraction!

Draw a picture and write two equivalent fractions to represent each amount of chocolate. One of the the fractions in each box should have a denominator of twelve.

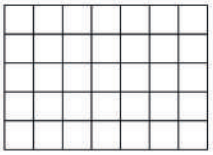
12 pieces  $\frac{12}{12}$ $\frac{1}{1}$	9 pieces  9/12 = 3/4
6 pieces  6/12 = 1/2	4 pieces  4/12 = 1/3
3 pieces  3/12 = 1/4	2 pieces  2/12 = 1/6



Area = 5 (length) x 5 (width) = 25 units²

Color 3 columns of squares.
What is the FRACTION of the colored area compared to the total area? 3/5

AREA of the colored squares = 15 units²



Area = 7 (length) x 5 (width) = 35 units²

Color 5 columns of squares.
What is the FRACTION of the colored area compared to the total area? 5/7

AREA of the colored squares = 25 units²

Date _____

Fraction Addition

Draw a picture to illustrate each number sentence in each box, then find a common denominator and add the fractions.

$\frac{2}{3} + \frac{1}{4} = \frac{3}{4}$ 	$\frac{1}{2} + \frac{1}{2} = 1$	$\frac{1}{3} + \frac{1}{6} = 3/6$	
$\frac{1}{3} + \frac{1}{3} = 2/3$	$\frac{1}{4} + \frac{1}{12} = 4/12$	$\frac{1}{2} + \frac{1}{6} = 4/6$	$\frac{1}{2} + \frac{1}{3} = 5/6$
$\frac{3}{4} + \frac{1}{4} = 1$	$\frac{2}{12} + \frac{4}{6} = 10/12$	$\frac{2}{3} + \frac{1}{4} = 11/12$	$\frac{5}{6} + \frac{1}{12} = 11/12$

Fraction Subtraction Hey, that rhymes!

Draw a picture to illustrate each number sentence in each box, then find a common denominator and subtract the fractions.

$\frac{2}{3} - \frac{1}{4} = \frac{1}{4}$ 	$\frac{1}{2} - \frac{3}{12} = 3/12$	$\frac{1}{4} - \frac{1}{6} = 1/12$	$\frac{2}{3} - \frac{5}{12} = 3/12$
$\frac{1}{3} - \frac{1}{4} = 1/12$	$\frac{1}{4} - \frac{1}{12} = 2/12$	$\frac{3}{4} - \frac{3}{6} = 3/12$	$\frac{1}{2} - \frac{1}{3} = 1/6$

List the first ten multiples of:

6, 12, 18, 24, 30, 36, 42, 48, 54, 60

7, 14, 21, 28, 35, 42, 49, 56, 63, 70

4, 8, 12, 16, 20, 24, 28, 32, 36, 40

6, 12, 18, 24, 30, 36, 42, 48, 54, 60

3, 6, 9, 12, 15, 18, 21, 24, 27, 30

8, 16, 24, 32, 40, 48, 56, 64, 72, 80

Find the LCD:

$\frac{2}{6}$ and $\frac{5}{7}$ LCD 42

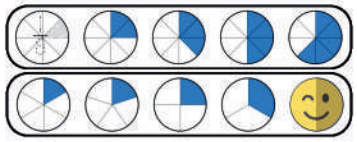
$\frac{1}{4}$ and $\frac{2}{6}$ LCD 12

$\frac{1}{3}$ and $\frac{3}{8}$ LCD 24

Order these fractions from least to greatest. Draw each fraction, then label it.

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

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



Use your number line to find the sum/difference of each problem.

11 + -13 = -2	5 - -5 = 10	-9 - -8 = -1
-9 + -14 = -23	2 - 6 = -4	5 - -10 = 15
-1 - 12 = -13	7 - 8 = -1	11 - 10 = -1
3 - -7 = 10	-8 + 7 = -1	3 - 12 = -9

Round each number to the nearest 10; add the rounded numbers mentally.

67 + 35

70 + 40 = 110

23 + 19

20 + 20 = 40

88 + 24

90 + 20 = 110

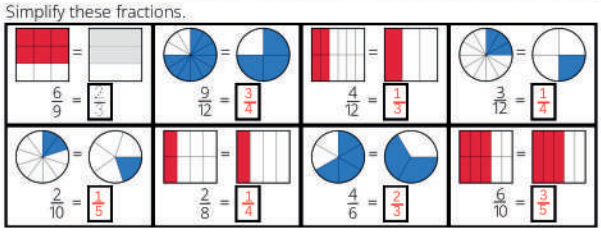
55 + 54

60 + 50 = 110

141

Date _____

Simplify these fractions.



Fractions LCD 12	3/4	2/3	1/6	1/2	4/12
Equivalent Fractions with LCD	9/12	8/12	2/12	6/12	4/12
Order fractions least to greatest	2/12	4/12	6/12	8/12	9/12

Fractions LCD 20	2/5	1/1	3/4	1/2	7/10
Equivalent Fractions with LCD	8/20	20/20	15/20	10/20	14/20
Order fractions least to greatest	8/20	10/20	14/20	15/20	20/20

Add these fractions:

$\frac{2}{4} + \frac{2}{6} = 5/6$

- Find the Lowest Common Denominator
- Convert both fractions so they have the LCD.
- Add the fractions.
- Simplify the sum.

List the first ten multiples of:

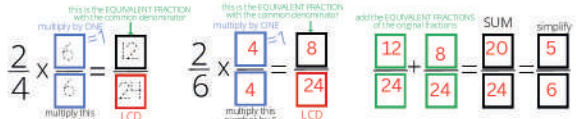
4, 8, 12, 16, 20, 24, 28, 32, 36, 40

6, 12, 18, 24, 30, 36, 42, 48, 54, 60

Find the LCD:

$\frac{2}{4}$ and $\frac{2}{6}$ LCD 24 use this LCD

Convert both of these fractions so they have a common denominator:



142

4 x 5 = 20

5 + 4 = 9

4 x 3 = 6

2 + 3 + 3 = 8

3 x 4 = 12

5 = 5

3 = 3

6 = 6

2 = 2

4 = 4

3 x 3 = 9

8 + 6 = 14

9 x 5 = 45

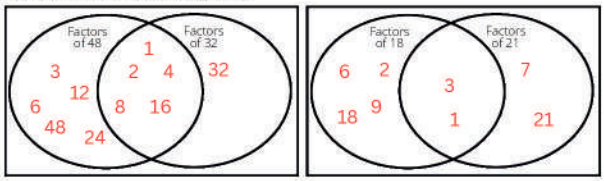
2 x 2 = 4

4 + 7 = 11

Five children will share fifteen cookies. Write a number sentence and illustrate it.

15 / 5 =3

Complete these Venn Diagrams.



Use your number line to find the sum/difference of each problem.

3 + 5 = 8	4 + -8 = -4	-2 - 6 = -8
3 - -5 = 8	4 - 8 = -4	2 - -6 = 8
-3 + 5 = 2	4 + 8 = 12	6 + -2 = 4
3 - 5 = -2	-4 - -8 = 4	-2 + -6 = -8

143

Date _____

Multiply fractions by WHOLE numbers. Always simplify!

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

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

Multiply fractions by fractions. Always simplify!

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

$\frac{1}{3} \times \frac{1}{4} = \frac{1}{12}$ $\frac{1}{4} \times \frac{3}{4} = \frac{3}{16}$ $\frac{3}{5} \times \frac{3}{6} = \frac{9}{30}$ $\frac{1}{2} \times \frac{1}{4} = \frac{1}{8}$

The operators are missing! Insert the correct operator (+, -, x) in each yellow circle to make the number sentence true. All answers have been simplified.

$\frac{1}{2} \times \frac{1}{3} = \frac{1}{6}$ $\frac{3}{4} - \frac{2}{5} = \frac{7}{20}$ $\frac{2}{3} \times \frac{3}{4} = \frac{1}{2}$ $\frac{2}{5} + \frac{3}{5} = 1$

$\frac{1}{3} \times \frac{1}{3} = \frac{1}{9}$ $\frac{1}{4} + \frac{2}{3} = \frac{11}{12}$ $\frac{3}{5} - \frac{1}{2} = \frac{1}{10}$ $\frac{2}{3} - \frac{1}{3} = \frac{1}{3}$

$\frac{4}{5} - \frac{2}{3} = \frac{2}{15}$ $\frac{5}{6} \times \frac{2}{5} = \frac{1}{3}$ $\frac{3}{7} + \frac{5}{7} = 1\frac{1}{7}$ $\frac{1}{2} + \frac{2}{4} = 1$

144

How much change will you receive if you pay for each item with $1.00?

21 cents

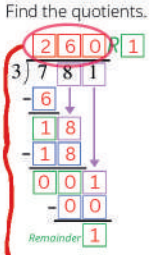
57 cents

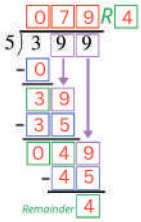
29 cents

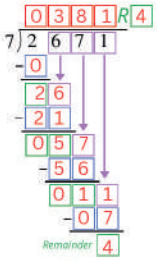
Fractions LCD 24	$\frac{3}{6}$	$\frac{1}{2}$	$\frac{2}{4}$	$\frac{7}{8}$	$\frac{2}{3}$
Equivalent Fractions with LCD	$\frac{12}{24}$	$\frac{12}{24}$	$\frac{12}{24}$	$\frac{21}{24}$	$\frac{16}{24}$
Order fractions least to greatest	$\frac{12}{24}$	$\frac{12}{24}$	$\frac{12}{24}$	$\frac{16}{24}$	$\frac{21}{24}$

Fractions LCD 30	$\frac{1}{5}$	$\frac{9}{10}$	$\frac{1}{3}$	$\frac{6}{15}$	$\frac{5}{6}$
Equivalent Fractions with LCD	$\frac{6}{30}$	$\frac{27}{30}$	$\frac{10}{30}$	$\frac{12}{30}$	$\frac{25}{30}$
Order fractions least to greatest	$\frac{6}{30}$	$\frac{10}{30}$	$\frac{12}{30}$	$\frac{25}{30}$	$\frac{27}{30}$

Find the quotients.



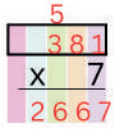




Check your division.

add the remainder 781

add the remainder 399



add the remainder 2671

Date _____

Divide fractions by WHOLE numbers. Always simplify!
Never divide by a fraction, instead multiply by the reciprocal.

$\frac{1}{3} \div 3 = \frac{1}{3} \times \frac{1}{3} = \frac{1}{9}$

how many times will 3 go into 1/3?

only 1/9 of 3 will fit inside 1/3

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

how many times will 2 go into 1/2?

only 1/4 of 2 will fit inside 1/2

$\frac{4}{6} \div 3 = \frac{4}{6} \times \frac{1}{3} = \frac{4}{18} = \frac{2}{9}$

how many times will 3 go into 4/6?

only 4/18 of 3 will fit inside 4/6

$\frac{3}{7} \div 3 = \frac{1}{7}$ $\quad \frac{1}{4} \div 3 = \frac{1}{12}$ $\quad \frac{2}{6} \div 3 = \frac{1}{9}$ $\quad \frac{2}{3} \div 3 = \frac{2}{9}$

Divide fractions by fractions. Always simplify!
Never divide by a fraction, instead multiply by the reciprocal.

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

how many times will 1/2 go into 1/2?

once - they're the same size!

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

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

once AND another 1/3 of 1/4

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

how many times will 1/2 fit into 4/5?

once AND another 3/5 of 4/5

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

One donut costs 75 cents. How much is one half dozen donuts? What is your change after you pay with a $5 bill?

6 donuts will cost $4.50

50 cents is your change

Round each number to the nearest 10 and add the rounded numbers.

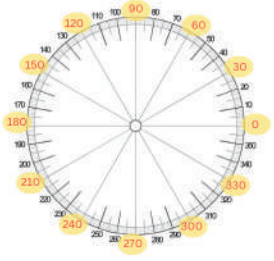
35 + 86
40 + 90 = 130

19 + 33
20 + 30 = 50

27 + 55
30 + 60 = 90

51 + 68
50 + 70 = 120

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



Draw:

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

Library story time starts at 10:30 AM. The clock below shows the current time. It takes 20 minutes to drive to the library. How much time do you have before you have to leave?

55 minutes

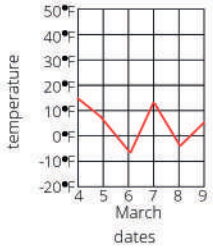
Date _____

Complete this table. Leave the percent column empty for now.

Visual Fraction	Numerical Fraction	Percent	Decimal
	1/10	10%	0.1
	2/10	20%	0.2
	3/10	30%	0.3
	4/10	40%	0.4
	5/10	50%	0.5
	6/10	60%	0.6
	7/10	70%	0.7
	8/10	80%	0.8
	9/10	90%	0.9
	10/10	100%	1

Draw a line graph to show the following temperatures.

DATE	TEMP.
March 4	15°F
March 5	8°F
March 6	-6°F
March 7	12°F
March 8	-4°F
March 9	5°F



Why do we use line graphs to show temperature?
It allows us to more clearly see the patterns

Your family hatched chicks from eggs. You incubated two dozen eggs. Not all of them hatched. Eight more eggs hatched than didn't. How many chicks do you have?

We have 16 chicks

If it takes you two and a half hours to drive to the airport and you have to be there by 7:00 am, what time do you need to leave home?

4:30 am

There are three tennis balls in a small package. The medium-sized package has twice that amount. The largest package has five times as many balls as the small size.

How many tennis balls are in the medium-sized package? 6

How many tennis balls are in the largest package? 15

You have one gallon of water. Use a blue crayon to "fill" as many of these containers as you can before you run out of water. Use all of the water.

What fraction of the containers did you "fill"? 8/10

What decimal is that fraction? 0.8

You are having a pizza party with 13 friends, plus yourself. You figure each person will want to eat 4 slices.

How many slices do you need? 52 13 (# of people) x 4 (# of slices per person) = 52 (slices needed)

Each pizza has eight slices. How many pizzas do you need?

$\frac{56}{8} = 7$ (improper fraction) $56 \div 8 = 7$ $8\overline{)56}$ 7

Improper fractions have a larger numerator than denominator. They should be written as a whole number or a mixed number instead of as a top heavy (larger numerator) fraction. This one is a WHOLE number.

Date _____

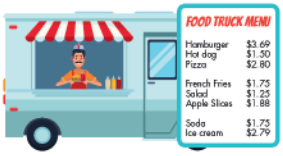
Use the menu prices to add up the cost of each meal. Find each customer's change if they pay with a $10.00 bill.

2.80 + 1.25 + 1.75 + 5.80 = 10.00 − 5.80 = 4.20

$4.20 is your change

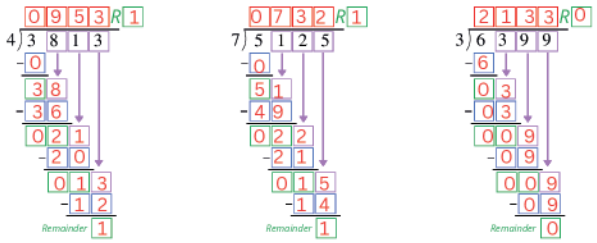
3.69 + 1.75 + 1.75 + 7.19 = 10.00 − 7.19 = 2.81

$2.81 is your change



2.79 + 1.50 + 1.75 + 1.75 + 7.79 = 10.00 − 7.79 = 2.21

$2.21 is your change



Check your division. Multiply each quotient by its divisor.

add the remainder 3813 add the remainder 5125 add the remainder 6399

Re-write and stack the numbers, lining up the decimal points. Find the sum.

4.3 + 9.1 = 13.4 7.5 + 2.55 = 10.05 1.75 + 2.3 = 4.05

5.02 + 3.4 = 8.42 1.43 + 2.1 = 3.53 2.18 + 1.22 = 3.4

1.14 + 1.16 = 2.3 2.7 + 1.75 = 4.45 1.6 + 1.8 = 3.4

Fractions LCD 18	$\frac{1}{2}$	$\frac{1}{18}$	$\frac{7}{9}$	$\frac{2}{3}$	$\frac{5}{6}$
Equivalent Fractions with LCD	$\frac{9}{18}$	$\frac{1}{18}$	$\frac{14}{18}$	$\frac{12}{18}$	$\frac{15}{18}$
Order fractions least to greatest	$\frac{1}{18}$	$\frac{9}{18}$	$\frac{12}{18}$	$\frac{14}{18}$	$\frac{15}{18}$

Fractions LCD 21	$\frac{2}{3}$	$\frac{4}{7}$	$\frac{1}{3}$	$\frac{11}{21}$	$\frac{6}{7}$
Equivalent Fractions with LCD	$\frac{14}{21}$	$\frac{12}{21}$	$\frac{7}{21}$	$\frac{11}{21}$	$\frac{18}{21}$
Order fractions least to greatest	$\frac{7}{21}$	$\frac{11}{21}$	$\frac{12}{21}$	$\frac{14}{21}$	$\frac{18}{21}$

If you paid for each of these items with $5.00, how much change would you receive? Draw the bills and coins you would use to make that amount.

ANSWERS MAY CHANGE DEPENDING ON HOW THE CHANGE IS DRAWN

Use the correct comparison symbol (<, >, =).

358 - 129 > 74 + 57

$\sqrt{81} - 1$ < 6 x 3

28/4 = 56/8

72/9 = $\sqrt{64}$

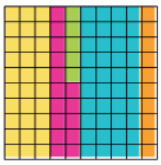
one half < three fourths

seconds in one minute > cups in one gallon

Date _____

Complete the percent column in the table on page 148.

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



percent	fraction	percent	fraction
30%	30/100	40%	40/100
15%	15/100	10%	10/100
5%	5/100		

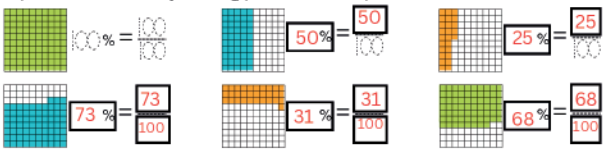
Add all of the percentages. 30 + 40 + 15 + 10 + 5 = 100

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

Because they all take part of a whole.

Do percentages always add up to 100%? Yes.

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



Writing Fractions:

What fractional part of this word is vowels? 1/4

What fractional part of this word is consonants? 3/4

MATH

What fractional part of this word is vowels? 2/5

What fractional part of this word is consonants? 3/5

GAMES

Send each number from the IN column through the function machine. Figure out the rule for each function and complete the OUT column of the function table.

These two are hard. The rule has TWO steps. Think double.

rule: -4	
IN	OUT
11	7
19	15
24	20
4	0
50	46
16	12

rule: x4	
IN	OUT
9	36
12	48
8	32
17	68
15	60
5	20

rule: double plus one	
IN	OUT
3	7
7	15
4	9
8	17
10	21
5	11

rule: double minus one	
IN	OUT
10	19
12	23
7	13
6	11
8	15
3	5

rule: x3	
IN	OUT
12	36
1	3
5	15
0	0
7	21
3	9

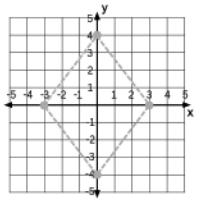
You have seven quarters and your brother has nine quarters. How many quarters do you have altogether? Write a number sentence.

7 quarters + 9 quarters= 16 quarters

How much money is that?

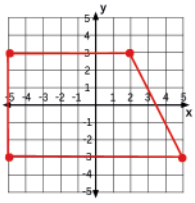
4 dollars

Let's draw quadrilaterals. Graph the points listed below each coordinate plane, then connect the dots in the order they are given.



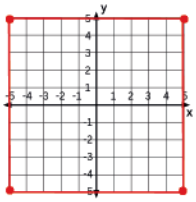
1.(0, -4) 3.(0, 4)
2.(3, 0) 4.(-3, 0)
5.(0, -4)

Shape name: rhombus



1.(-5, -3) 3.(2, 3)
2.(5, -3) 4.(-5, 3)
5.(-5, -3)

Shape name: quadrilateral



1.(-5, -5) 3.(5, 5)
2.(5, -5) 4.(-5, 5)
5.(-5, -5)

Shape name: square

Date _____

Solve:

2 + 9 x 3 - 8 = 21

4 - 15 ÷ 3 + 1 = 0

5 x 5 - 4 x 4 = 9

Order of Operations (PEMDAS):

1. **P**arentheses
2. **E**xponents
3. **M**ultiply & **D**ivide from left to right
4. **A**dd & **S**ubtract from left to right

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

answers may vary

3	x	4	+	6	=	18
+		x		-		-
5	-	1	x	3	=	2
-		+		x		-
2	+	4	x	2	=	10
=		=		=		=
6	-	8	x	0	=	6

8	x	2	-	5	=	11
-		-		+		-
3	x	2	-	1	=	5
x		+		-		+
1	x	3	+	6	=	9
=		=		=		=
5	x	3	-	0	=	15

You earned $125.50 doing yard work for one neighbor and $178.50 doing yard work for another neighbor. How much did you earn altogether?

125.50
+ 178.50
$304.00

Add or subtract these decimals. Stack the numbers and line the digits up by decimals.

1.5 + 0.34 = 1.84

1.1 + 4.6 = 5.7

8.6 - 1.12 = 7.48

2.75 + 2.25 = 5

3.8 - 2.2 = 1.3

9.9 - 8.1 = 1.8

3.7 - 1.31 = 2.39

7.6 + 2.3 = 9.9

8.4 + 5.14 = 13.54

Find the missing decimal addends.

1.5 + 2.2 = 3.7

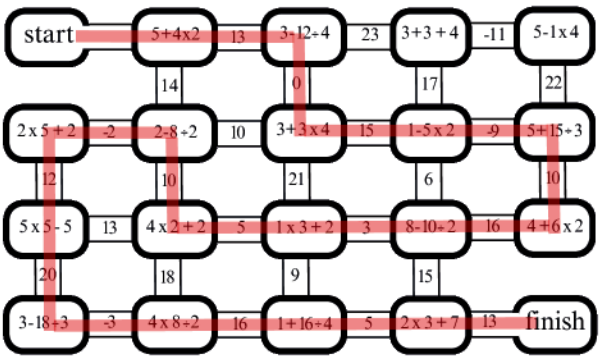
2.8 + 2.2 = 5

3.7 + 2.6 = 6.3

7.5 + 2.5 = 10

4.2 + 3.3 = 7.5

4.1 + 4.8 = 8.9



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

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

$\frac{1}{3} + \frac{1}{4} = \frac{7}{12}$ $\frac{5}{6} - \frac{3}{12} = \frac{7}{12}$ $\frac{1}{2} + \frac{3}{6} = \frac{1}{6}$ $\frac{7}{8} - \frac{1}{2} = \frac{3}{8}$

$\frac{1}{3} - \frac{1}{12} = \frac{2}{12}$ $\frac{3}{4} - \frac{3}{12} = \frac{6}{12}$ $\frac{3}{4} - \frac{3}{6} = \frac{3}{12}$ $\frac{2}{2} - \frac{1}{3} = \frac{2}{3}$

page 156 PEMDAS SOLUTIONS at the end

Add the fractions and color the squares to match. Remember to simplify the result!

$\frac{1}{3} + \frac{2}{9} = \frac{5}{9}$

$\frac{3}{4} + \frac{1}{8} = \frac{7}{8}$

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

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

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

$\frac{1}{4} + \frac{1}{3} = \frac{7}{12}$

Add or subtract these percentages.

14% + 25% = 39%

31% + 18% = 49%

97% - 79% = 18%

100% - 99% = 1%

11% + 54% = 65%

65% - 22% = 43%

If your grandma was born in 1952 how old is she?

Subtract 1952 from the current year.

You practiced the piano for half an hour every day and you have a lesson for one hour each week. How much time each week do you spend playing the piano?

4 1/2 hours

Let's paint your bedroom door. What color would you like? _____

Use a tape measure to measure your door:

length: ANSWERS MAY VARY width: area:

Each pint of paint will cover 1,500 square inches and costs $8.95.
How many pints of paint will you need?

How much will the paint cost?

If you pay with a $20 bill, how much change will you get? Draw the coins and bills.

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

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

7	-	6	+	2	=	3
+		-		-		x
3	+	12	÷	4	=	6
-		÷		+		-
4	x	3	-	4	=	8
=		=		=		=
6	+	2	x	2	=	10

What will be the date of your next birthday? _____

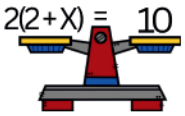
How many days is that from today? _____

What will be the date of your fifteenth birthday? _____

ANSWERS MAY VARY

page 158 PEMDAS SOLUTIONS at the end

Solve for x: (get x by itself)



Step 1: divide BOTH sides of the equation by 2 → 2(2+X) = 10

Step 2: subtract 2 from BOTH sides of the equation → (2+X) = 5, X = 3

Step 3: Check your answer by replacing X with the answer. → 2(2 + 3) = 10 true!

Solve for the variable:

X + 8 = 10	X = 2	4(5 - X) = 12	X = 2
(X + 6) ÷ 3 = 5	X = 9	7X = 21	X = 3
2 + 3(8 - X) = 11	X = 5	2(X + 5) - 5 = 17	X = 6

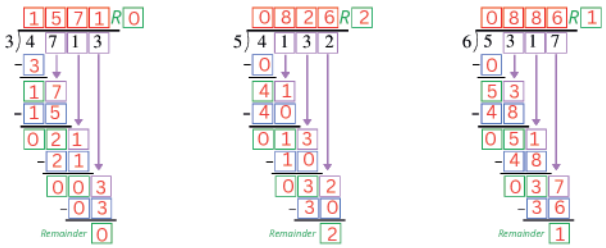
The operators are missing! Insert the correct operator (+, -, x, ÷) in each yellow circle to make the number sentence true. All answers have been simplified.

$\frac{1}{2} \times \frac{1}{3} = \frac{1}{6}$ $\quad \frac{2}{4} \times \frac{3}{4} = \frac{6}{16}$ $\quad \frac{2}{3} \div \frac{3}{4} = \frac{8}{9}$ $\quad \frac{2}{5} \div \frac{3}{5} = \frac{10}{15}$

$\frac{1}{3} \times \frac{1}{4} = \frac{1}{12}$ $\quad \frac{1}{4} \div \frac{2}{3} = \frac{3}{8}$ $\quad \frac{2}{5} \times \frac{1}{3} = \frac{2}{15}$ $\quad \frac{2}{3} + \frac{1}{3} = \frac{3}{3}$

$\frac{1}{2} + \frac{1}{5} = \frac{7}{10}$ $\quad \frac{2}{3} - \frac{1}{3} = \frac{1}{3}$ $\quad \frac{4}{5} - \frac{2}{5} = \frac{2}{5}$ $\quad \frac{3}{4} \times \frac{2}{3} = \frac{6}{12}$

Use the menu prices to add up the cost of each order. Find each customer's change if they pay with a $10.00 bill.



Check your division. Multiply each quotient by its divisor.

1571	826	886
x 3	x 5	x 6
4713	4130	5316
add the remainder 4713	add the remainder 4132	add the remainder 5317

page 160 PEMDAS SOLUTIONS at the end

Subtract the fractions and color the squares to match. Remember to simplify the result!

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

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

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

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

$\frac{4}{5} - \frac{3}{10} = \frac{5}{10}$

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

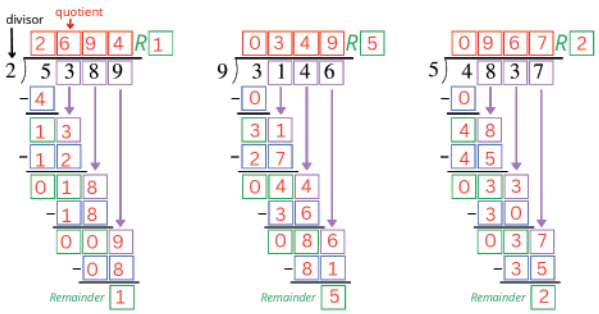
Measure this rectangle with a ruler, using inches.

length: 2 width: 1

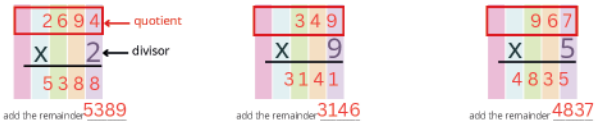
perimeter: 6 area: 2

Divide the rectangle into eighths. Shade two parts. What fractional part is shaded? 1/4

What fractional part is not shaded? 3/4



Multiply the QUOTIENT and divisor from each problem above to check your division.



Find the missing fractional addends to make each number sentence true.

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

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

$\frac{3}{12} + \frac{3}{12} = \frac{1}{2}$ $\quad \frac{5}{10} + \frac{3}{10} = \frac{4}{5}$ $\quad \frac{2}{5} + \frac{3}{5} = \frac{5}{5} = 1$ $\quad \frac{3}{10} + \frac{3}{5} = \frac{9}{10}$

page 156 SOLUTIONS

$8 \div 4 \times 9 - 3 = 15$
1. multiplication left to right 8/4x9=18
2. subtract 18-3=15

$3 \times 7 - 3 \times 1 = 18$
1. multiplication
2. subtract 21-3=18

$1 - 16 \div 4 + 3 = 0$
1. division 16/4=4
2. addition/subtraction left to right 1-4+3=0

$3 + 7 \times 3 + 1 = 25$
1. multiplication 7x3=21
2. addition/subtraction left to right 3+21+1=25

$5 \times 5 - 4 \times 4 = 9$
1. multiplication
2. subtraction left to right 25-16=9

$(3 + 7) \times (3 + 1) = 40$
1. parentheses
2. multiply left to right 10x4=40

$5 \times (5 - 4) \times 4 = 20$
1. parentheses 5-4=1
2. multiplication 5 x 1 x 4=20

$(3 + 7) + 3 \times 1 = 13$
1. parentheses 3+7=10
2. multiplication 3x1=3
3. add left to right 10+3=13

page 158 SOLUTIONS

$5 \times (5 - 4) \times 4 = 20$
1. parentheses 5-4=1
2. multiplication left to right 5x1x4=20

$3 \times 6 - 3 \times 6 = 0$
1. multiplication left to right
2. subtraction left to right

$5 \times 5(4 - 4) = 0$
1. parentheses interior 4-4=0
2. parentheses exterior 0x5=0
3. multiplication left to right 5x0=0

$3 \times (6 - 3) \times 6 = 54$
1. parentheses 6-3=3
2. multiplication left to right 3x3x6=54

$5(5 - 4) \times 4 = 20$
1. parentheses interior 5-4=1
2. parenthese exterior 5x1=5
3. multiplication left to right 5x4=20

$3(6 - 3) \times 6 = 54$
1. parentheses interior 6-3=3
2. parentheses exterior 3x3=9
3. multiplication left to right 9x6=54

$5(5 \times 4) - 4 = 96$
1. parentheses interior 5x4=20
2. parentheses exterior 5x20=100
3. subtraction left to right 100-4=96

$3 \times 6(3 \times 6) = 324$
1. parentheses interior 3x6=18
2. parentheses exterior 6x18=108
3. multiplication left to right 3x108=324

$3^2 - 6(10 - 9) + 12 \div 2 = 9$
1. exponent
2. parentheses interior 10-9=1
3. parentheses exterior 6x1=6
4. division 12/2=6
5. addition/subtraction left to right
9 - 6 + 6

$(2^2 + 4) \div 2^3 + 1 = 2$
1. two exponents
2. parentheses interior 4+4=8
3. division left to right 8/8=1
4. addition/subtraction left to right 1+1=2
1 + 1

page 160 SOLUTIONS

$4^2 \div 2(3 - 1) \times \sqrt{9} = 12$
1. parentheses interior
2. parentheses exterior
3. mult/div left to right
16 ÷ 4 x 3

$25 - 2(9 - 16) \div 2 = 20$
1. exponent
2. parentheses interior 9-4=5
3. parenteses exterior 5x2=10
4. division 10/2=5
5. subtraction 25-5=20

$3 + 5^2 - \sqrt{81} = 19$
1. exponents (including roots)
2. add/sub left to right 3+25-9=19

$2 + (6^2 - 3) \div 3 = 13$
1. exponent
2. parentheses interior 36-3=33
3. division 33/3=11
4. addition/subtraction left to right 2+11=13

$8(5 - 4) \div 12 = 6$
1. parentheses interior 5 - 4 = 9
2. parentheses exterior 9 x 8 = 72
3. mult/div left to right 72/12 = 6

$7(5 - 2) \div 3 = 7$
1. parentheses interior 5-2=3
2. parentheses exterior 7x3=21
3. division 21/3=7

$2(5 \times 3 - 2 \times 3) - 4 = 2$
1. exponent
2. mult in parentheses
3. subtraction in parentheses
4. parentheses exterior multiplication 2x3=6
5. subtraction left to right 6-4=2

$\sqrt{3 \times 3 + 4^2} = 5$
Inside the radical:
1. exponent
2. multiplication 3x3=9
3. addition 9+16=25
4. the square root of 25 is 5

$4 - 6 \times 2 + 14 \div 2 = 11$
16 - 12 + 7
1. exponent
2. mult/div left to right 6x2-12 and 14/2=7
3. addition/subtraction left to right 16-12+7=11

$(8 + 4) \div 2 + 1^3 = 7$
1. exponent
2. parentheses 8+4=12
3. division 12/2=6
4. addition 6+1=7