

Date \_\_\_\_\_

What comes next? Ready, set, go!

17, 18, 15, 16, 14, 13, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_



describe the rule:



1, 2, 3, 5, 8, 13, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_



describe the rule:



1, 2, 4, 7, 11, 16, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_



describe the rule:



Create your own pattern:

\_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

describe the rule:

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

$$5 \times \square = 20$$

$$3 \times \square = 6$$

$$2 \times \square = 10$$

$$3 \times \square = 21$$

$$8 \times \square = 32$$

$$7 \times \square = 56$$

$$6 \times \square = 48$$

Find the value of the VARIABLE in each number sentence.

$$5A = 20 \quad A = \underline{\quad}$$

$$3B = 6 \quad B = \underline{\quad}$$

$$2C = 10 \quad C = \underline{\quad}$$

$$3X = 21 \quad X = \underline{\quad}$$

$$8Y = 32 \quad Y = \underline{\quad}$$

$$7Z = 56 \quad Z = \underline{\quad}$$

$$6T = 48 \quad T = \underline{\quad}$$

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:

IN	OUT
1	4
2	5
3	6
4	
5	
6	

rule:

IN	OUT
1	0
2	0
3	0
4	
5	
6	

rule:

IN	OUT
1	3
2	6
3	9
4	
5	
6	

rule:

IN	OUT
1	0
2	1
3	2
4	
5	
6	

rule:

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

rule:

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

rule:

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

rule:

IN	OUT
1	8
2	16
3	24
4	
5	
6	
7	
8	
9	
10	

create your own rule:

IN	OUT