$$A = 4$$
  $B = -3$   $C = -6$ 

1. 
$$C-A$$

$$A = 4$$
  $B = -3$   $C = -6$ 

3. 
$$A - B$$

$$(4)-(-3)$$
  
= 7

$$A = 4$$
  $B = -3$   $C = -6$ 

2. 
$$B + C$$

$$(-3) + (-6)$$
  
= -9

$$A = 4$$
  $B = -3$   $C = -6$ 

4. 
$$B+C-A$$

$$4. B+C-A - 3+(-6)-4$$

$$-9-4=-13$$

The opposite of x.

all you do is change the sign on the value of x ... it becomes the opposite of what it used to be.

$$A = 4 \quad B = -3 \quad C = -6$$

$$6. \quad C - B + A \quad (-4) - (-3) + 4$$

$$-3 + 4 = 1$$

7. 
$$-A-B-C$$
  
 $-4-(-3)-(-6)$   
 $=-1+6$ 

A = 4 B = -3 C = -6

$$A = 4$$
  $B = -3$   $C = -6$   
8.)-2B-C  
 $-2(-3)-(-6)$   
 $+6+6=17$ 

What is a variable?

A symbol that represents an unknown number(s).

What is the difference between these two?

Equation

Expression

Has an equal sign!

No equal sign!

What is the difference between these two terms?

Solve

Simplify

Find the value of the variable(s) that makes the equation of inequality true.

Find out "what it equals".

Do as much to the expression as you can.

Write a variable expression to model each statement exactly as written.

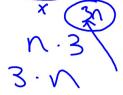
1. Four more than an unknown number.



3. The quotient of an unknown number and twelve.



2. The product of an unknown number and three.



4. The difference of eight and an unknown number.

5. Six ess than an unknown number.

7. The product of seven and the quantity two minus an unknown number.

6. The sum of an unknown number and four.

8. Nine less than the product of five and an unknown number.

$$5x-9$$

Evalute each expression for A = 3, B = 6, and C = -2Do NOT use a calculator.

$$A = 3, B = 6, \text{ and } C = -2$$
11. 
$$\frac{B + 9C}{A}$$

$$2 + 3(-2) + 3(-2)$$

$$= -4$$

$$= -4$$

$$A = 3, B = 6, \text{ and } C = -2$$

10.  $BC - A$ 

(6)(-2) - 3

-12+3

$$A = 3, B = 6, \text{ and } C = -2$$

12.  $-C - B$ 
 $-(-2) - 6$ 
 $-6$ 

#### Addition Rules:

### Same Sign

### Different Sign

- Keep the sign
- Keep sign of bigger #
- Find their sum
- Find their difference

# Subtracting Numbers:

Subtracting is the same as

adding the opposite.

$$6 + 44 = 10$$

### Identity Property of Addition:

$$a + 0 = a$$

### Inverse Property of Addition:

$$b + -b = 0$$

The additive inverse of any number is its OPPOSITE

The sum of any number and its opposite is always ZERO

### Find each:

$$-7 - -3 = -4$$

$$-15 + -12 = -27$$

Multiplying Rules:

When multiplying two numbers:

- Same Sign → Positive
- Different Sign→Negative

Multiplying and Dividing Numbers:

Find each product or quotient

$$(5)(-2) = -10 \qquad \frac{15}{-3} = -5$$

$$(-6)(-8) = 48 \qquad \frac{-24}{-8} = 3$$

$$(-4)(3) = -12 \qquad \frac{-18}{9} = -2$$

Dividing Rules: Same as Multiplying Rules!



Quiz next Tuesday over adding, subtracting, multiplying, and dividing integers without a calculator.

You must get 100%

You can retake it until you get 100%

## Hwk #2: Due tomorrow, August 28th

Page 29 Page 41 Problems: 63-67 Problems: 25-29

IXL: Due Monday, Sept. 2nd at 6pm **B.1** Add, subtract, multiply, and divide integers **I.1** Write variable expressions

Need A Smart Score of: 90%