

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

1. $C - A$

$$\begin{aligned} (-6) - 4 \\ = -10 \end{aligned}$$

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

2. $B + C$

$$\begin{aligned} (-3) + (-6) \\ = -9 \end{aligned}$$

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

3. $A - B$

$$\begin{aligned} (4) - (-3) \\ = 7 \end{aligned}$$

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

4. $B + C - A$

$$\begin{aligned} -3 + (-6) - 4 \\ -9 - 4 = -13 \end{aligned}$$

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

5. $2A - C + B$

$$\begin{aligned} &2(4) - (-6) + -3 \\ &8 + 6 + -3 \\ &11 \end{aligned}$$

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

6. $C - B + A$

$$\begin{aligned} &(-6) - (-3) + 4 \\ &-3 + 4 = 1 \end{aligned}$$

How do you say this: $-x$

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.

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

7. $-A - B - C$

$$\begin{aligned} &-4 - (-3) - (-6) \\ &= -1 + 6 \\ &= 5 \end{aligned}$$

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

8.) $-2B - C$

$$\begin{array}{c} -2(-3) - (-6) \\ \quad \checkmark \\ +6 + 6 = 12 \end{array}$$

What is the difference between these two?

Equation

Has an equal
sign!

Expression

No equal sign!

What is a variable?

A symbol that represents an unknown number(s).

What is the difference between these two terms?

Solve

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

Simplify

Find out "what it equals".
Do as much to the expression
as you can.

Hwk #1

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

1. Four more than an unknown number.

$$\begin{array}{c} + \\ x + 4 \\ 4 + x \end{array}$$

2. The product of an unknown number and three.

$$\begin{array}{c} x \\ n \cdot 3 \\ 3 \cdot n \end{array}$$

3. The quotient of an unknown number and twelve.

$$\frac{x}{12}$$

$$x \div 12$$

4. The difference of eight and an unknown number.

$$8 - x$$

5. Six less than an unknown number.

$$x - 6$$

6. The sum of an unknown number and four.

$$x + 4$$

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

$$7(x - 2)$$

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

$$5x - 9$$

Evaluate each expression for $A = 3$, $B = 6$, and $C = -2$

Do NOT use a calculator.

9. $A^2 - C$

$$(3)^2 - (-2) = 9 + 2 = 11$$

$A = 3$, $B = 6$, and $C = -2$

10. $BC - A$

$$(6)(-2) - 3 = -12 - 3 = -15$$

$A = 3$, $B = 6$, and $C = -2$

11. $\frac{B+9C}{A}$

$$\frac{6 + 9(-2)}{3} = \frac{6 - 18}{3} = \frac{-12}{3} = -4$$

$A = 3$, $B = 6$, and $C = -2$

12. $-C - B$

$$-(-2) - 6 = 2 - 6 = -4$$

Addition Rules:

Same Sign

- Keep the sign
- Find their sum

Different Sign

- Keep sign of bigger #
- Find their difference

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

Subtracting Numbers:

Subtracting is the same as

adding the opposite.

$$6 + +4 = 10$$

Find each:

$$-8 - 3 = -11$$

$$-14 + 6 = -8$$

$$6 - 11 = -5$$

$$-9 + -7 = -16$$

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

$$16 - -20 = 36$$

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

Multiplying Rules:

When multiplying two numbers:

- Same Sign → Positive
- Different Sign → Negative

Dividing Rules: Same as Multiplying Rules!

Multiplying and Dividing Numbers:

Find each product or quotient

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

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

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



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 Problems: 63-67

Page 41 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%