

From yesterday:

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

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

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

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

12. $-C - B$

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

$$2 - 6 =$$

$$\boxed{-4}$$

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

13. $2A^2 - C^2$

$$\begin{array}{l} 2(3)^2 - (-2)^2 \\ 2(9) - 4 \\ 18 - 4 \\ \boxed{14} \end{array}$$

What is the difference between these two?

$$(-2)^2$$

$$= 4$$

This tells you to square negative 2.

$$-2^2$$

$$= -4$$

This tells you to square 2 then take the opposite.

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



There are similar properties for multiplication:

Identity Property of Mult:

$$(b)(1)=b$$

Inverse Property of Mult:

$$b \cdot \frac{1}{b} = 1$$

(reciprocal)

Subtracting Numbers:

Subtracting is the same as

adding the opposite.

Therefore, every subtraction problem can be turned into an addition problem to be simplified using the addition rules.

Find each: Use a small white board

$$-8 - 3 = -11$$

$$-8 + -3 = -11$$

$$6 - 11 = -5$$

$$6 + -11 = -5$$

$$-14 + 6 = -8$$