

**HOMEWORK** – Math 8

Mrs. Shea

**DUE 11.22.2019**

Selena spends \$53.94 to buy a necklace and bracelet set for each of her friends. Each necklace costs \$9.99, and each bracelet costs \$7.99. How many necklace and bracelet sets,  $s$ , did Selena buy?

$$\boxed{\phantom{00}} s + \boxed{\phantom{00}} s = 53.94$$

$$\boxed{\phantom{00}} s = 53.94$$

Selena buys necklace and bracelet sets for  $\boxed{\phantom{00}}$  friends.

$$s = \boxed{\phantom{00}}$$

**Convince Me!** Suppose the equation is  $9.99s + 7.99s + 4.6 = 53.94$ . Can you combine the  $s$  terms and 4.6? **Explain**.

Class A was given a sunflower with a height of 8 centimeters that grows at a rate of  $3\frac{1}{2}$  centimeters per week. Class B was given a sunflower with a height of 10 centimeters that grows at a rate of  $3\frac{1}{4}$  centimeters per week. After how many weeks are the sunflowers the same height?

Let  $w$  = the number of weeks.

$$\boxed{\phantom{00}} w + 8 = \boxed{\phantom{00}} w + 10$$

$$\boxed{\phantom{00}} w + 8 = 10$$

$$\boxed{\phantom{00}} w = \boxed{\phantom{00}}$$

$$w = \boxed{\phantom{00}}$$

**Convince Me!** How can you check your work to make sure the value of the variable makes the equation true? Explain.

The sunflowers are the same height after  $\boxed{\phantom{00}}$  weeks.

$$6 - 4x = 6x - 8x + 2$$

$$6 - 4x = \boxed{\phantom{00}} + 2$$

$$6 = \boxed{\phantom{00}} + 2$$

$$\boxed{\phantom{00}} = \boxed{\phantom{00}}$$

$$\boxed{\phantom{00}} = x$$

1)  $6 - 6x = 5x - 9x - 2$

2)  $5 + 14x = 9x - 5$

$$3) 96 - 4.5x - 3.2x = 5.6y + 42.80$$

$$4) 7(2x - 1) - 11 = 6 + 6x$$

$$5) -x = 9(x - 10)$$

$$6) 0.5(5 - 7x) = 8 - (4x + 6)$$

$$7) -3x - 32 = -2(5 - 4x)$$

$$8) -3x - 4(4x - 8) = 3(-8x - 1)$$

$$9) 6y - 10y - 11 = 8y - 2y + 29$$