

Lesson 1.11 – Substitution Method HOMEWORK

Solve by Substitution:

1.
$$\begin{cases} 2x + 3y = 10 \\ y = -x + 2 \end{cases}$$

2.
$$\begin{cases} 6x - y = -4 \\ 2x + 2y = 15 \end{cases}$$

3.
$$\begin{cases} x - 2y = 1 \\ y = x + 2 \end{cases}$$

4.
$$\begin{cases} x - y = 3 \\ 9 = 3x - 3y \end{cases}$$

$$5. \begin{cases} x + \frac{1}{4}y = -3 \\ y - \frac{1}{2}x = -3 \end{cases}$$

6. Mrs. Pratt wants to buy gifts for her 5 favorite students. If she buys 2 pencils and 3 erasers her total would be \$2.40. If she buys 6 pencils and 1 eraser, her total would be \$4.80. What is the cost of each pencil and each eraser?

7. Izzie the cat worked out this problem: $\begin{cases} x - y = 5 \\ 2x - 3y = -8 \end{cases}$

Her work is shown here: $2x - 3(x - 5) = -8$

$$2x - 3x - 15 = -8$$

$$-x - 15 = -8$$

$$-x = 7$$

$$x = -7, \text{ so } y = -12.$$



Is Izzie correct? Why or why not?

