

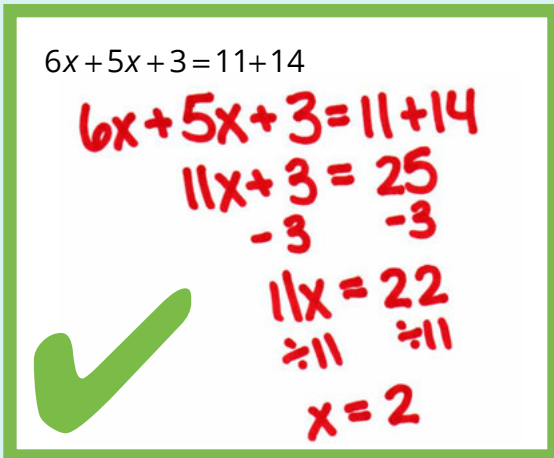
Name: _____ Date: _____

Teacher: _____ Section: _____

For each set, first examine the problem on the left and answer the question(s) about it. Then complete the similar problem on the right.

SET 1: Solve each equation. SHOW ALL OF YOUR WORK.

Ken solved this problem **correctly**.
Here is his work:


$$6x + 5x + 3 = 11 + 14$$
$$6x + 5x + 3 = 11 + 14$$
$$11x + 3 = 25$$
$$\begin{array}{r} -3 \\ -3 \end{array}$$
$$11x = 22$$
$$\begin{array}{r} \div 11 \\ \div 11 \end{array}$$
$$x = 2$$

- In the first step, Ken combined $6x$ and $5x$. Why didn't he also add the 3 to get $14x$?

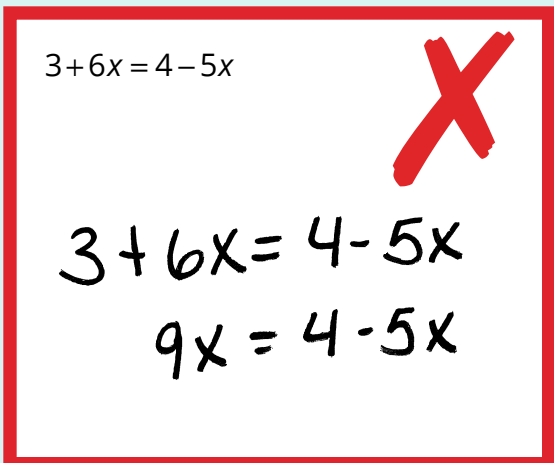


Your Turn:

$$-11 = -6x - 3x - 2$$

SET 2: Solve each equation. SHOW ALL OF YOUR WORK.

Jackson **didn't** solve this problem correctly.
Here is his first step:


$$3 + 6x = 4 - 5x$$
$$3 + 6x = 4 - 5x$$
$$9x = 4 - 5x$$

- Which terms did Jackson incorrectly combine to get $9x$?
- Give an example of two terms that would correctly add to $9x$.



Your Turn:

$$-6x + 3 = 4 - 5x$$

SET 3: Solve each equation. SHOW ALL OF YOUR WORK.

Umi **didn't** solve this problem correctly.
Here is her first step:

$$3x = 4x - 6 + 5$$

$$3x = 4x - 6 + 5$$

$$-5 \quad -5$$

$$3x = 4x - 11$$

- What did Umi do as her first step?
- What should Umi have done on the right side of the equation in order to solve it?



Your Turn:

$$6x = 3x - 5 - 4$$

SET 4: Solve each equation. SHOW ALL OF YOUR WORK.

Lupe solved this problem **correctly**.
Here is her work:

$$6(x+3) = 12 + 4x$$

$$6x + 18 = 12 + 4x$$

$$-4x \quad -4x$$

$$2x + 18 = 12$$

$$-18 \quad -18$$

$$2x = -6$$

$$\div 2 \quad \div 2$$

$$x = -3$$

- Where did Lupe get $6x + 18$ from?



Your Turn:

$$-3(x+6) = 4 - 5x$$