

Day 6 Practice: Variables on Both Sides

#6

Answers are NOT in order: -11 -3 0 3 -4 one answer is used twice

<p>1. $5 - 3x = 14$</p> $\begin{array}{r} -5 \quad -5 \\ -3x = 9 \\ \underline{-3} \quad \underline{-3} \\ x = -3 \end{array}$	<p>2. $2x + 4 - 7x = 59$</p> $\begin{array}{r} -5x + 4 = 59 \\ -4 \quad -4 \\ -5x = 55 \\ \underline{-5} \quad \underline{-5} \\ x = -11 \end{array}$
<p>3. $6x - 1 = 2x + 11$</p> $\begin{array}{r} -2x \quad -2x \\ 4x - 1 = 11 \\ +1 \quad +1 \\ 4x = 12 \\ \underline{4} \quad \underline{4} \\ x = 3 \end{array}$	<p>4. $-2(10 - 5x) = -60$</p> $\begin{array}{r} -20 + 10x = -60 \\ +20 \quad +20 \\ 10x = -40 \\ \underline{10} \quad \underline{10} \\ x = -4 \end{array}$

5. $3x - 4(x + 1) = 5x + 14$

$$3x - 4x - 4 = 5x + 14$$

$$\begin{array}{r} -x - 4 = 5x + 14 \\ +x \quad +x \end{array}$$

$$-4 = 6x + 14$$

$$\begin{array}{r} -14 \quad -14 \\ 76 = 6x \end{array}$$

$$\frac{76}{6} = \frac{6x}{6}$$

$$x = -3$$

6. $2x + 8(x - 5) = -5(x + 8)$

$$2x + 8x - 40 = -5x - 40$$

$$\begin{array}{r} 10x - 40 = -5x - 40 \\ +5x \quad +5x \end{array}$$

$$15x - 40 = -40$$

$$\begin{array}{r} +40 \quad +40 \\ 15x = 0 \end{array}$$

$$15x = 0$$

$$x = 0$$

AN OUNCE OF ALGEBRA IS WORTH A TON OF VERBAL ARGUMENT

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