

Algebra 1 12/13

Warm Up IXL

Algebra 1

I.6

2-4 Solving Equations with Variables on Both Sides

I can solve equations with the variable on each side

Ex. 1 Solve $5a + 2 = 6 - 7a$

$$\begin{array}{r} 5a + 2 = 6 - 7a \\ +7a \quad \quad +7a \\ \hline 12a + 2 = 6 \\ -2 \quad \quad -2 \\ \hline 12a = 4 \div 4 \\ \hline 12 \quad \quad 12 \div 4 \end{array}$$

$$a = \frac{1}{3}$$

I can solve equations with the variable on each side

Ex. 2 Solve $\frac{x}{2} + 1 = \frac{1}{4}x - 6$

$$\begin{aligned} \frac{1 \cdot 2}{2 \cdot 2} - \frac{1}{4} \\ \frac{2}{4} - \frac{1}{4} \\ = \frac{1}{4} \end{aligned}$$

$$\begin{aligned} \frac{1}{2} \cdot x + 1 &= \frac{1}{4}x - 6 \\ -\frac{1}{4}x & \quad -\frac{1}{4}x \\ \hline \frac{1}{4} \cdot x + 1 &= -6 \\ -1 & \quad -1 \end{aligned}$$

$$\frac{1}{4}x = -7.4$$

$$x = -28$$

I can solve equations with the variable on each side

Ex. 3 Solve $1.3c = 3.3c + 2.8$

$$\begin{array}{r} -3.3c \quad -3.3c \\ \hline -2c = 2.8 \\ \hline -2 \quad -2 \end{array}$$

$$C = -1.4$$

I can solve equations with the variable on each side

Ex 4 Solve $8s - 10 = 3(6 - 2s)$

$$\begin{array}{r} 8s - 10 = 18 - 6s \\ +6s \qquad \qquad \qquad +6s \\ \hline \end{array}$$

$$\begin{array}{r} 14s - 10 = 18 \\ +10 \qquad +10 \\ \hline \end{array}$$

$$\begin{array}{r} 14s = 28 \\ \hline 14 \qquad \qquad 14 \end{array}$$

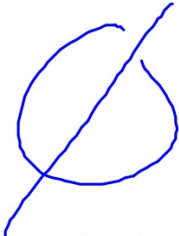
$$s = 2$$

I can solve equations with the variable on each side

Ex. 5 Solve $6(y - 5) = 2(10 + 3y)$

$$\begin{array}{r} \cancel{6y} - 30 = 20 + \cancel{6y} \\ -\cancel{6y} \qquad \qquad \qquad -\cancel{6y} \\ \hline \end{array}$$

$$-30 = 20$$



no solution

I can solve equations with the variable on each side

ICA Pg 100
2-20 even

Hmwk IXL Algebra 1 J.5

#14

$$\frac{(b-4)}{6} = \frac{b}{2}$$

$$2(b-4) = 6b$$