

## Extra Practice (optional)

1.  $(8x) - 27 - 10 - 6x = 15$

$$\begin{array}{r} 2x - 37 = 15 \\ +37 \quad +37 \\ \hline \end{array}$$

$$\frac{2x}{2} = \frac{52}{2}$$

$$x = 26$$

3.  $-10 = (-14v) + 14v$

$$-10 = 0 \text{ False statement}$$

No solution

5.  $\frac{3}{2}x + \frac{1}{5} = \frac{3}{4}$

$$\frac{30}{20}x + \frac{4}{20} = \frac{15}{20}$$

$$\frac{30}{30} \cdot \frac{30}{20}x = \frac{11}{20} \cdot \frac{20}{30}$$

$$x = \frac{11}{30}$$

7.  $7x - 2(3x + 16) = -23$

$$(7x) - 6x - 32 = -23$$

$$x - 32 = -23$$

$$x = 9$$

2.  $-19 + (3x) - 11 + (2x) = 2$

$$\begin{array}{r} 5x - 30 = 2 \\ +30 \quad +30 \\ \hline \end{array}$$

$$5x = 32$$

$$x = \frac{32}{5} \text{ OR } x = 6\frac{2}{5}$$

4.  $30 = -5(6x + 6)$

$$\begin{array}{r} 30 = -30x - 30 \\ +30 \quad \quad +30 \\ \hline \end{array}$$

$$\frac{60}{-30} = \frac{-30x}{-30}$$

$$-2 = x$$

6.  $\frac{1}{2}(4 - x) = \frac{2}{5}$

$$2 - \frac{1}{2}x = \frac{2}{5}$$

$$2 - \frac{5}{10}x = \frac{4}{10}$$

$$-\frac{16}{5} - \frac{5}{10}x = -\frac{16}{10}$$

$$\begin{array}{r} \frac{4}{10} - \frac{20}{10} \\ = -\frac{16}{10} \end{array}$$

$$x = \frac{16}{5}$$

8.  $\frac{2}{1} \cdot \frac{9+x}{2} = 10 \cdot \frac{2}{1}$

$$\begin{array}{r} 9+x = 20 \\ -9 \quad -9 \\ \hline \end{array}$$

$$x = 11$$

8. Mr. Young's class did a food drive. Brad brought some cans. Brittany brought twice as many cans as Brad. Belinda brought 7 more cans than Brad. They brought 27 cans total. Set up an equation and solve it to find out how many cans Brad brought.

$x = \#$  of cans Brad brought

$2x = \#$  of cans Brittany brought

$x+7 = \#$  of cans Belinda brought

$$(x) + (2x) + (x) + 7 = 27$$

$$\begin{array}{r} 4x + 7 = 27 \\ -7 \quad -7 \\ \hline \end{array}$$

$$\frac{4x}{4} = \frac{20}{4}$$

$$x = 5$$

Brad brought 5 cans.