

Two-Step Equations With Rational Numbers

1.

$$\begin{array}{r} 4m - 9 = -17 \\ +9 \quad +9 \\ \hline 4m = -8 \\ \frac{4m}{4} = \frac{-8}{4} \\ m = -2 \end{array}$$

2.

$$\begin{array}{r} \frac{1}{6}x - 17.1 = -18 \\ +17.1 \quad +17.1 \\ \hline \frac{1}{6}x = -.9 \\ \frac{6}{1} \cdot \frac{1}{6}x = \frac{-9}{5} \cdot \frac{6}{1} = \frac{-27}{5} \\ x = -5\frac{2}{5} \text{ OR } -27/5 \end{array}$$

3.

$$\begin{array}{r} -5.2m + 11.15 = -3.41 \\ -11.15 \quad +11.15 \\ \hline -5.2m = 14.56 \\ \frac{-5.2m}{-5.2} = \frac{14.56}{-5.2} \\ m = 2.8 \end{array}$$

4.

$$\begin{array}{r} 3.45x + (-7.43) = -20.86 \\ -7.43 \quad +7.43 \\ \hline 3.45x = -28.29 \\ \frac{3.45x}{3.45} = \frac{-28.29}{3.45} \\ x = -8.2 \end{array}$$

5.

$$\begin{array}{r} \frac{1}{5}k - 3 = -3\frac{1}{3} \\ +3 \quad +3 \quad +9 \\ \hline \frac{1}{5}k = -\frac{10}{3} \\ \frac{5}{1} \cdot \frac{1}{5}k = -\frac{1}{3} \cdot \frac{5}{1} \\ k = -\frac{5}{3} \text{ OR } -1\frac{2}{3} \end{array}$$

6.

$$\begin{array}{r} \frac{h}{2} + \left(+6\frac{1}{2}\right) = 14\frac{1}{4} \\ -6\frac{1}{2} \quad -6\frac{1}{2} = -6\frac{2}{4} \\ \hline \frac{2}{1} \cdot \frac{h}{2} = 7\frac{3}{4} = \frac{31}{4} \\ h = \frac{31}{2} \cdot \frac{2}{1} \\ h = \frac{31}{2} \text{ OR } 15\frac{1}{2} \end{array}$$

5.2 | 14.56
104
416
416
x