

## Review Exercise Set 5

Exercise 1: Is 5 a solution of  $3y - 4 = 2y$ ?

Exercise 2: Solve.

$$5m + 1 = 10m - 3$$

Exercise 3: Solve.

$$d + 1.36 = 4.69$$

Exercise 4: Solve.

$$-\frac{m}{3} + \frac{4}{9} = -\frac{2}{9}$$

Exercise 5: Solve.

$$\frac{3}{4}x = -\frac{9}{20}$$

## Review Exercise Set 5 Answer Key

Exercise 1: Is 5 a solution of  $3y - 4 = 2y$ ?

$$\begin{aligned}3y - 4 &= 2y \\3(5) - 4 &= 2(5) \\15 - 4 &= 10 \\11 &= 10 \text{ False}\end{aligned}$$

**5 is not a solution since it produces a false statement**

Exercise 2: Solve.

$$\begin{aligned}5m + 1 &= 10m - 3 \\5m - 5m + 1 &= 10m - 5m - 3 \\1 &= 5m - 3 \\1 + 3 &= 5m - 3 + 3 \\4 &= 5m \\4 \div 5 &= 5m \div 5 \\ \frac{4}{5} &= m\end{aligned}$$

Exercise 3: Solve.

$$\begin{aligned}d + 1.36 &= 4.69 \\d + 1.36 - 1.36 &= 4.69 - 1.36 \\d &= 3.33\end{aligned}$$

Exercise 4: Solve.

$$-\frac{m}{3} + \frac{4}{9} = -\frac{2}{9}$$

Multiply each fraction by the LCD

$$9 \times \left(-\frac{m}{3}\right) + 9 \times \left(\frac{4}{9}\right) = 9 \times \left(-\frac{2}{9}\right)$$

Divide the denominators into the LCD

$$3 \times (-m) + 1 \times (4) = 1 \times (-2)$$

Multiply

$$-3m + 4 = -2$$

Subtract 4 from each side to isolate the variable term

$$-3m + 4 - 4 = -2 - 4$$

$$-3m = -6$$

Divide both sides by -3 to solve for m

$$-3m \div -3 = -6 \div -3$$

$$m = 2$$

Exercise 5: Solve.

$$\frac{3}{4}x = -\frac{9}{20}$$

$$20 \times \left( \frac{3}{4}x \right) = 20 \times \left( -\frac{9}{20} \right)$$

$$5 \times (3x) = 1 \times (-9)$$

$$15x = -9$$

$$x = \frac{-9}{15}$$

$$x = -\frac{3}{5}$$