

Name: _____

Date: _____

1-step Check Solution: Questions

- (1) Determine whether $x = 12$ is a solution to the equation $\frac{x}{3} = 4$:

$$\begin{aligned}\text{LHS} &= & \text{RHS} &= \\ &= & & \\ &= & &\end{aligned}$$

\therefore Since LHS ... RHS, $x = 12$ a solution to the equation.

- (2) Determine whether $x = 35$ is a solution to the equation $\frac{x}{5} = 5$:

$$\begin{aligned}\text{LHS} &= & \text{RHS} &= \\ &= & & \\ &= & &\end{aligned}$$

\therefore Since LHS ... RHS, $x = 35$ a solution to the equation.

- (3) Determine whether $x = -4$ is a solution to the equation $x + 7 = 3$:

$$\begin{aligned}\text{LHS} &= & \text{RHS} &= \\ &= & & \\ &= & &\end{aligned}$$

\therefore Since LHS ... RHS, $x = -4$ a solution to the equation.

- (4) Determine whether $x = 3$ is a solution to the equation $x + 1 = 4$:

$$\begin{aligned}\text{LHS} &= & \text{RHS} &= \\ &= & & \\ &= & &\end{aligned}$$

\therefore Since LHS ... RHS, $x = 3$ a solution to the equation.

- (5) Determine whether $x = -8$ is a solution to the equation $x + 10 = 2$:

$$\begin{aligned}\text{LHS} &= & \text{RHS} &= \\ &= & & \\ &= & &\end{aligned}$$

\therefore Since LHS ... RHS, $x = -8$ a solution to the equation.

- (6) Determine whether $x = -2$ is a solution to the equation $x + 5 = 3$:

$$\begin{aligned}\text{LHS} &= & \text{RHS} &= \\ &= & & \\ &= & &\end{aligned}$$

\therefore Since LHS ... RHS, $x = -2$ a solution to the equation.

- (7) Determine whether $x = -4$ is a solution to the equation $x + 9 = 5$:

$$\begin{aligned}\text{LHS} &= & \text{RHS} &= \\ &= & & \\ &= & &\end{aligned}$$

\therefore Since LHS ... RHS, $x = -4$ a solution to the equation.

- (8) Determine whether $x = 4$ is a solution to the equation $8x = 16$:

$$\begin{aligned}\text{LHS} &= & \text{RHS} &= \\ &= & & \\ &= & &\end{aligned}$$

\therefore Since LHS ... RHS, $x = 4$ a solution to the equation.

- (9) Determine whether $x = 16$ is a solution to the equation $x - 6 = 8$:

$$\begin{aligned}\text{LHS} &= & \text{RHS} &= \\ &= & & \\ &= & &\end{aligned}$$

\therefore Since LHS ... RHS, $x = 16$ a solution to the equation.

- (10) Determine whether $x = 72$ is a solution to the equation $\frac{x}{9} = 8$:

$$\begin{aligned}\text{LHS} &= & \text{RHS} &= \\ &= & & \\ &= & &\end{aligned}$$

\therefore Since LHS ... RHS, $x = 72$ a solution to the equation.

Name: _____

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1-step Check Solution: Answers

- (1) Determine whether $x = 12$ is a solution to the equation $\frac{x}{3} = 4$:

$$\begin{aligned}\text{LHS} &= \frac{x}{3} & \text{RHS} &= 4 \\ &= \frac{12}{3} \\ &= 4\end{aligned}$$

\therefore Since LHS = RHS, $x = 12$ is a solution to the equation.

- (2) Determine whether $x = 35$ is a solution to the equation $\frac{x}{5} = 5$:

$$\begin{aligned}\text{LHS} &= \frac{x}{5} & \text{RHS} &= 5 \\ &= \frac{35}{5} \\ &= 7\end{aligned}$$

\therefore Since LHS \neq RHS, $x = 35$ is not a solution to the equation.

- (3) Determine whether $x = -4$ is a solution to the equation $x + 7 = 3$:

$$\begin{aligned}\text{LHS} &= x + 7 & \text{RHS} &= 3 \\ &= -4 + 7 \\ &= 3\end{aligned}$$

\therefore Since LHS = RHS, $x = -4$ is a solution to the equation.

- (4) Determine whether $x = 3$ is a solution to the equation $x + 1 = 4$:

$$\begin{aligned}\text{LHS} &= x + 1 & \text{RHS} &= 4 \\ &= 3 + 1 \\ &= 4\end{aligned}$$

\therefore Since LHS = RHS, $x = 3$ is a solution to the equation.

- (5) Determine whether $x = -8$ is a solution to the equation $x + 10 = 2$:

$$\begin{aligned}\text{LHS} &= x + 10 & \text{RHS} &= 2 \\ &= -8 + 10 \\ &= 2\end{aligned}$$

\therefore Since LHS = RHS, $x = -8$ is a solution to the equation.

- (6) Determine whether $x = -2$ is a solution to the equation $x + 5 = 3$:

$$\begin{aligned}\text{LHS} &= x + 5 & \text{RHS} &= 3 \\ &= -2 + 5 \\ &= 3\end{aligned}$$

\therefore Since LHS = RHS, $x = -2$ is a solution to the equation.

- (7) Determine whether $x = -4$ is a solution to the equation $x + 9 = 5$:

$$\begin{aligned}\text{LHS} &= x + 9 & \text{RHS} &= 5 \\ &= -4 + 9 \\ &= 5\end{aligned}$$

\therefore Since LHS = RHS, $x = -4$ is a solution to the equation.

- (8) Determine whether $x = 4$ is a solution to the equation $8x = 16$:

$$\begin{aligned}\text{LHS} &= 8x & \text{RHS} &= 16 \\ &= 8 \times 4 \\ &= 32\end{aligned}$$

\therefore Since LHS \neq RHS, $x = 4$ is not a solution to the equation.

- (9) Determine whether $x = 16$ is a solution to the equation $x - 6 = 8$:

$$\begin{aligned}\text{LHS} &= x - 6 & \text{RHS} &= 8 \\ &= 16 - 6 \\ &= 10\end{aligned}$$

\therefore Since LHS \neq RHS, $x = 16$ is not a solution to the equation.

- (10) Determine whether $x = 72$ is a solution to the equation $\frac{x}{9} = 8$:

$$\begin{aligned}\text{LHS} &= \frac{x}{9} & \text{RHS} &= 8 \\ &= \frac{72}{9} \\ &= 8\end{aligned}$$

\therefore Since LHS = RHS, $x = 72$ is a solution to the equation.