Name: _____ **Date:** _____

2-step Check Solution: Questions

(1) Determine whether $x = 7$ is a solution to the equation $3(x + 4) = 30$:

LHS = RHS =

=

=

$\therefore$ Since LHS ... RHS, $x = 7$ ..... a solution to the equation.

(2) Determine whether $x = 3$ is a solution to the equation $5(x + 8) = 55$:

LHS = RHS =

=

=

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

(3) Determine whether $x = 30$ is a solution to the equation $\frac{x-3}{3} = 8$:

LHS = RHS =

=

=

$\therefore$ Since LHS ... RHS, $x = 30$ ..... a solution to the equation.

(4) Determine whether $x = 3$ is a solution to the equation $x + 10 - 7 = 6$:

LHS = RHS =

=

=

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

(5) Determine whether $x = -2$ is a solution to the equation $\frac{x}{8} \times 8 = 6$:

LHS = RHS =

=

=

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

(6) Determine whether $x = 3$ is a solution to the equation $x + 7 - 1 = 6$:

LHS = RHS =

=

=

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

(7) Determine whether $x = 26$ is a solution to the equation $\frac{x}{2} - 9 = 5$:

LHS = RHS =

=

=

$\therefore$ Since LHS ... RHS, $x = 26$ ..... a solution to the equation.

(8) Determine whether $x = 38$ is a solution to the equation $\frac{x-3}{7} = 8$:

LHS = RHS =

=

=

$\therefore$ Since LHS ... RHS, $x = 38$ ..... a solution to the equation.

(9) Determine whether $x = 2$ is a solution to the equation $8(x + 1) = 32$:

LHS = RHS =

=

=

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

(10) Determine whether $x = 168$ is a solution to the equation $\frac{x}{7} \times \frac{1}{4} = 6$:

LHS = RHS =

=

=

$\therefore$ Since LHS ... RHS, $x = 168$ ..... a solution to the equation.

Name: _____ **Date:** _____

2-step Check Solution: Answers

(1) Determine whether $x = 7$ is a solution to the equation $3(x + 4) = 30$:

$$\begin{aligned} \text{LHS} &= 3(x + 4) & \text{RHS} &= 30 \\ &= 3 \times (7 + 4) \\ &= 33 \end{aligned}$$

$\therefore$ Since LHS $\neq$ RHS, $x = 7$ is not a solution to the equation.

(2) Determine whether $x = 3$ is a solution to the equation $5(x + 8) = 55$:

$$\begin{aligned} \text{LHS} &= 5(x + 8) & \text{RHS} &= 55 \\ &= 5 \times (3 + 8) \\ &= 55 \end{aligned}$$

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

(3) Determine whether $x = 30$ is a solution to the equation $\frac{x-3}{3} = 8$:

$$\begin{aligned} \text{LHS} &= \frac{x - 3}{3} & \text{RHS} &= 8 \\ &= \frac{30 - 3}{3} \\ &= 9.0 \end{aligned}$$

$\therefore$ Since LHS $\neq$ RHS, $x = 30$ is not a solution to the equation.

(4) Determine whether $x = 3$ is a solution to the equation $x + 10 - 7 = 6$:

$$\begin{aligned} \text{LHS} &= x + 10 - 7 & \text{RHS} &= 6 \\ &= 3 + 10 - 7 \\ &= 6 \end{aligned}$$

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

(5) Determine whether $x = -2$ is a solution to the equation $\frac{x}{8} \times 8 = 6$:

$$\begin{aligned} \text{LHS} &= \frac{x}{8} \times 8 & \text{RHS} &= 6 \\ &= \frac{-2}{8} \times 8 \\ &= -2 \end{aligned}$$

$\therefore$ Since LHS $\neq$ RHS, $x = -2$ is not a solution to the equation.

(6) Determine whether $x = 3$ is a solution to the equation $x + 7 - 1 = 6$:

$$\begin{aligned} \text{LHS} &= x + 7 - 1 & \text{RHS} &= 6 \\ &= 3 + 7 - 1 \\ &= 9 \end{aligned}$$

$\therefore$ Since LHS $\neq$ RHS, $x = 3$ is not a solution to the equation.

(7) Determine whether $x = 26$ is a solution to the equation $\frac{x}{2} - 9 = 5$:

$$\begin{aligned} \text{LHS} &= \frac{x}{2} - 9 & \text{RHS} &= 5 \\ &= \frac{26}{2} - 9 \\ &= 4 \end{aligned}$$

$\therefore$ Since LHS $\neq$ RHS, $x = 26$ is not a solution to the equation.

(8) Determine whether $x = 38$ is a solution to the equation $\frac{x-3}{7} = 8$:

$$\begin{aligned} \text{LHS} &= \frac{x - 3}{7} & \text{RHS} &= 8 \\ &= \frac{38 - 3}{7} \\ &= 5.0 \end{aligned}$$

$\therefore$ Since LHS $\neq$ RHS, $x = 38$ is not a solution to the equation.

(9) Determine whether $x = 2$ is a solution to the equation $8(x + 1) = 32$:

$$\begin{aligned} \text{LHS} &= 8(x + 1) & \text{RHS} &= 32 \\ &= 8 \times (2 + 1) \\ &= 24 \end{aligned}$$

$\therefore$ Since LHS $\neq$ RHS, $x = 2$ is not a solution to the equation.

(10) Determine whether $x = 168$ is a solution to the equation $\frac{x}{7} \times \frac{1}{4} = 6$:

$$\begin{aligned} \text{LHS} &= \frac{x}{7} \times \frac{1}{4} & \text{RHS} &= 6 \\ &= \frac{168}{7} \times \frac{1}{4} \\ &= 6 \end{aligned}$$

$\therefore$ Since LHS = RHS, $x = 168$ is a solution to the equation.