Name: _____ **Date:** _____

Check Solution: Answers

(1) Determine whether $x = 6$ is a solution to the equation $5x = 30$:

$$\begin{aligned} \text{LHS} &= 5x & \text{RHS} &= 30 \\ &= 5 \times 6 \\ &= 30 \end{aligned}$$

$\therefore$ Since LHS = RHS, $x = 6$ is a solution to the equation.

(2) Determine whether $x = 7$ is a solution to the equation $10x = 60$:

$$\begin{aligned} \text{LHS} &= 10x & \text{RHS} &= 60 \\ &= 10 \times 7 \\ &= 70 \end{aligned}$$

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

(3) Determine whether $x = 4$ is a solution to the equation $6x = 36$:

$$\begin{aligned} \text{LHS} &= 6x & \text{RHS} &= 36 \\ &= 6 \times 4 \\ &= 24 \end{aligned}$$

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

(4) Determine whether $x = 6$ is a solution to the equation $9x = 54$:

$$\begin{aligned} \text{LHS} &= 9x & \text{RHS} &= 54 \\ &= 9 \times 6 \\ &= 54 \end{aligned}$$

$\therefore$ Since LHS = RHS, $x = 6$ is a solution to the equation.

(5) Determine whether $x = 10$ is a solution to the equation $8x = 80$:

$$\begin{aligned} \text{LHS} &= 8x & \text{RHS} &= 80 \\ &= 8 \times 10 \\ &= 80 \end{aligned}$$

$\therefore$ Since LHS = RHS, $x = 10$ is a solution to the equation.

(6) Determine whether $x = 3$ is a solution to the equation $6x = 18$:

$$\begin{aligned} \text{LHS} &= 6x & \text{RHS} &= 18 \\ &= 6 \times 3 \\ &= 18 \end{aligned}$$

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

(7) Determine whether $x = 2$ is a solution to the equation $6x = 12$:

$$\begin{aligned} \text{LHS} &= 6x & \text{RHS} &= 12 \\ &= 6 \times 2 \\ &= 12 \end{aligned}$$

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

(8) Determine whether $x = 7$ is a solution to the equation $5x = 40$:

$$\begin{aligned} \text{LHS} &= 5x & \text{RHS} &= 40 \\ &= 5 \times 7 \\ &= 35 \end{aligned}$$

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

(9) Determine whether $x = 5$ is a solution to the equation $8x = 40$:

$$\begin{aligned} \text{LHS} &= 8x & \text{RHS} &= 40 \\ &= 8 \times 5 \\ &= 40 \end{aligned}$$

$\therefore$ Since LHS = RHS, $x = 5$ is a solution to the equation.

(10) Determine whether $x = 7$ is a solution to the equation $8x = 56$:

$$\begin{aligned} \text{LHS} &= 8x & \text{RHS} &= 56 \\ &= 8 \times 7 \\ &= 56 \end{aligned}$$

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

(11) Determine whether $x = 8$ is a solution to the equation $8x = 64$:

$$\begin{aligned} \text{LHS} &= 8x & \text{RHS} &= 64 \\ &= 8 \times 8 \\ &= 64 \end{aligned}$$

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

(12) Determine whether $x = 5$ is a solution to the equation $9x = 45$:

$$\begin{aligned} \text{LHS} &= 9x & \text{RHS} &= 45 \\ &= 9 \times 5 \\ &= 45 \end{aligned}$$

$\therefore$ Since LHS = RHS, $x = 5$ is a solution to the equation.

(13) Determine whether $x = 6$ is a solution to the equation $6x = 54$:

$$\begin{aligned} \text{LHS} &= 6x & \text{RHS} &= 54 \\ &= 6 \times 6 \\ &= 36 \end{aligned}$$

$\therefore$ Since LHS $\neq$ RHS, $x = 6$ is not a solution to the equation.

(14) Determine whether $x = 6$ is a solution to the equation $6x = 24$:

$$\begin{aligned} \text{LHS} &= 6x & \text{RHS} &= 24 \\ &= 6 \times 6 \\ &= 36 \end{aligned}$$

$\therefore$ Since LHS $\neq$ RHS, $x = 6$ is not a solution to the equation.

(15) Determine whether $x = 4$ is a solution to the equation $5x = 25$:

$$\begin{aligned} \text{LHS} &= 5x & \text{RHS} &= 25 \\ &= 5 \times 4 \\ &= 20 \end{aligned}$$

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

(16) Determine whether $x = 11$ is a solution to the equation $9x = 90$:

$$\begin{aligned} \text{LHS} &= 9x & \text{RHS} &= 90 \\ &= 9 \times 11 \\ &= 99 \end{aligned}$$

$\therefore$ Since LHS $\neq$ RHS, $x = 11$ is not a solution to the equation.

(17) Determine whether $x = 3$ is a solution to the equation $3x = 6$:

$$\begin{aligned} \text{LHS} &= 3x & \text{RHS} &= 6 \\ &= 3 \times 3 \\ &= 9 \end{aligned}$$

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

(18) Determine whether $x = 7$ is a solution to the equation $7x = 49$:

$$\begin{aligned} \text{LHS} &= 7x & \text{RHS} &= 49 \\ &= 7 \times 7 \\ &= 49 \end{aligned}$$

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

(19) Determine whether $x = 1$ is a solution to the equation $5x = 15$:

$$\begin{aligned} \text{LHS} &= 5x & \text{RHS} &= 15 \\ &= 5 \times 1 \\ &= 5 \end{aligned}$$

$\therefore$ Since LHS $\neq$ RHS, $x = 1$ is not a solution to the equation.

(20) Determine whether $x = 3$ is a solution to the equation $8x = 32$:

$$\begin{aligned} \text{LHS} &= 8x & \text{RHS} &= 32 \\ &= 8 \times 3 \\ &= 24 \end{aligned}$$

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