

**Name:** \_\_\_\_\_

**Date:** \_\_\_\_\_

- Check Solution: Answers

- (1) Determine whether  $x = 11$  is a solution to the equation  $x - 1 = 10$ :

$$\begin{aligned}\text{LHS} &= x - 1 & \text{RHS} &= 10 \\ &= 11 - 1 \\ &= 10\end{aligned}$$

$\therefore$  Since  $\text{LHS} = \text{RHS}$ ,  $x = 11$  is a solution to the equation.

- (2) Determine whether  $x = 9$  is a solution to the equation  $x - 10 = 2$ :

$$\begin{aligned}\text{LHS} &= x - 10 & \text{RHS} &= 2 \\ &= 9 - 10 \\ &= -1\end{aligned}$$

$\therefore$  Since  $\text{LHS} \neq \text{RHS}$ ,  $x = 9$  is not a solution to the equation.

- (3) Determine whether  $x = 11$  is a solution to the equation  $x - 4 = 5$ :

$$\begin{aligned}\text{LHS} &= x - 4 & \text{RHS} &= 5 \\ &= 11 - 4 \\ &= 7\end{aligned}$$

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

- (4) Determine whether  $x = 17$  is a solution to the equation  $x - 10 = 7$ :

$$\begin{aligned}\text{LHS} &= x - 10 & \text{RHS} &= 7 \\ &= 17 - 10 \\ &= 7\end{aligned}$$

$\therefore$  Since  $\text{LHS} = \text{RHS}$ ,  $x = 17$  is a solution to the equation.

- (5) Determine whether  $x = 5$  is a solution to the equation  $x - 4 = 1$ :

$$\begin{aligned}\text{LHS} &= x - 4 & \text{RHS} &= 1 \\ &= 5 - 4 \\ &= 1\end{aligned}$$

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

- (6) Determine whether  $x = 2$  is a solution to the equation  $x - 1 = 1$ :

$$\begin{aligned}\text{LHS} &= x - 1 & \text{RHS} &= 1 \\ &= 2 - 1 \\ &= 1\end{aligned}$$

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

- (7) Determine whether  $x = 13$  is a solution to the equation  $x - 6 = 8$ :

$$\begin{aligned}\text{LHS} &= x - 6 & \text{RHS} &= 8 \\ &= 13 - 6 \\ &= 7\end{aligned}$$

$\therefore$  Since  $\text{LHS} \neq \text{RHS}$ ,  $x = 13$  is not a solution to the equation.

- (8) Determine whether  $x = 14$  is a solution to the equation  $x - 6 = 8$ :

$$\begin{aligned}\text{LHS} &= x - 6 & \text{RHS} &= 8 \\ &= 14 - 6 \\ &= 8\end{aligned}$$

$\therefore$  Since  $\text{LHS} = \text{RHS}$ ,  $x = 14$  is a solution to the equation.

- (9) Determine whether  $x = 3$  is a solution to the equation  $x - 1 = 2$ :

$$\begin{aligned}\text{LHS} &= x - 1 & \text{RHS} &= 2 \\ &= 3 - 1 \\ &= 2\end{aligned}$$

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

- (10) Determine whether  $x = 11$  is a solution to the equation  $x - 7 = 4$ :

$$\begin{aligned}\text{LHS} &= x - 7 & \text{RHS} &= 4 \\ &= 11 - 7 \\ &= 4\end{aligned}$$

$\therefore$  Since  $\text{LHS} = \text{RHS}$ ,  $x = 11$  is a solution to the equation.

- (11) Determine whether  $x = 8$  is a solution to the equation  $x - 1 = 5$ :

$$\begin{aligned}\text{LHS} &= x - 1 & \text{RHS} &= 5 \\ &= 8 - 1 \\ &= 7\end{aligned}$$

$\therefore$  Since  $\text{LHS} \neq \text{RHS}$ ,  $x = 8$  is not a solution to the equation.

- (12) Determine whether  $x = 8$  is a solution to the equation  $x - 4 = 7$ :

$$\begin{aligned}\text{LHS} &= x - 4 & \text{RHS} &= 7 \\ &= 8 - 4 \\ &= 4\end{aligned}$$

$\therefore$  Since  $\text{LHS} \neq \text{RHS}$ ,  $x = 8$  is not a solution to the equation.

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

$$\begin{aligned}\text{LHS} &= x - 7 & \text{RHS} &= 2 \\ &= 6 - 7 \\ &= -1\end{aligned}$$

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

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

$$\begin{aligned}\text{LHS} &= x - 8 & \text{RHS} &= 9 \\ &= 16 - 8 \\ &= 8\end{aligned}$$

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

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

$$\begin{aligned}\text{LHS} &= x - 6 & \text{RHS} &= 6 \\ &= 13 - 6 \\ &= 7\end{aligned}$$

$\therefore$  Since  $\text{LHS} \neq \text{RHS}$ ,  $x = 13$  is not a solution to the equation.

- (16) Determine whether  $x = 15$  is a solution to the equation  $x - 6 = 6$ :

$$\begin{aligned}\text{LHS} &= x - 6 & \text{RHS} &= 6 \\ &= 15 - 6 \\ &= 9\end{aligned}$$

$\therefore$  Since  $\text{LHS} \neq \text{RHS}$ ,  $x = 15$  is not a solution to the equation.

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

$$\begin{aligned}\text{LHS} &= x - 5 & \text{RHS} &= 1 \\ &= 6 - 5 \\ &= 1\end{aligned}$$

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

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

$$\begin{aligned}\text{LHS} &= x - 3 & \text{RHS} &= 2 \\ &= 3 - 3 \\ &= 0\end{aligned}$$

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

- (19) Determine whether  $x = 10$  is a solution to the equation  $x - 1 = 9$ :

$$\begin{aligned}\text{LHS} &= x - 1 & \text{RHS} &= 9 \\ &= 10 - 1 \\ &= 9\end{aligned}$$

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

- (20) Determine whether  $x = 6$  is a solution to the equation  $x - 4 = 2$ :

$$\begin{aligned}\text{LHS} &= x - 4 & \text{RHS} &= 2 \\ &= 6 - 4 \\ &= 2\end{aligned}$$

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