Name: _____ **Date:** _____

+x Check Solution: Answers

(1) Determine whether $x = 0$ is a solution to the equation $4(x + 2) = 20$:

$\text{LHS} = 4(x + 2)$ $\quad$ $\text{RHS} = 20$

$= 4 \times (0 + 2)$

$= 8$

$\therefore$ Since LHS $\neq$ RHS, $x = 0$ is not a solution to the equation.

(2) Determine whether $x = 3$ is a solution to the equation $7(x + 4) = 49$:

$\text{LHS} = 7(x + 4)$ $\quad$ $\text{RHS} = 49$

$= 7 \times (3 + 4)$

$= 49$

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

(3) Determine whether $x = 1$ is a solution to the equation $5(x + 8) = 45$:

$\text{LHS} = 5(x + 8)$ $\quad$ $\text{RHS} = 45$

$= 5 \times (1 + 8)$

$= 45$

$\therefore$ Since LHS = RHS, $x = 1$ is a solution to the equation.

(4) Determine whether $x = 7$ is a solution to the equation $9(x + 1) = 99$:

$\text{LHS} = 9(x + 1)$ $\quad$ $\text{RHS} = 99$

$= 9 \times (7 + 1)$

$= 72$

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

(5) Determine whether $x = 7$ is a solution to the equation $6(x + 2) = 72$:

$\text{LHS} = 6(x + 2)$ $\quad$ $\text{RHS} = 72$

$= 6 \times (7 + 2)$

$= 54$

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

(6) Determine whether $x = 7$ is a solution to the equation $3(x + 7) = 33$:

$\text{LHS} = 3(x + 7)$ $\quad$ $\text{RHS} = 33$

$= 3 \times (7 + 7)$

$= 42$

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

(7) Determine whether $x = 5$ is a solution to the equation $2(x + 3) = 20$:

$\text{LHS} = 2(x + 3)$ $\quad$ $\text{RHS} = 20$

$= 2 \times (5 + 3)$

$= 16$

$\therefore$ Since LHS $\neq$ RHS, $x = 5$ is not a solution to the equation.

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

$\text{LHS} = 2(x + 6)$ $\quad$ $\text{RHS} = 20$

$= 2 \times (4 + 6)$

$= 20$

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

(9) Determine whether $x = 5$ is a solution to the equation $2(x + 7) = 26$:

$\text{LHS} = 2(x + 7)$ $\quad$ $\text{RHS} = 26$

$= 2 \times (5 + 7)$

$= 24$

$\therefore$ Since LHS $\neq$ RHS, $x = 5$ is not a solution to the equation.

(10) Determine whether $x = 7$ is a solution to the equation $3(x + 2) = 27$:

$\text{LHS} = 3(x + 2)$ $\quad$ $\text{RHS} = 27$

$= 3 \times (7 + 2)$

$= 27$

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

(11) Determine whether $x = 8$ is a solution to the equation $7(x + 6) = 77$:

$\text{LHS} = 7(x + 6)$ $\qquad$ $\text{RHS} = 77$

$= 7 \times (8 + 6)$

$= 98$

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

(12) Determine whether $x = 8$ is a solution to the equation $6(x + 5) = 66$:

$\text{LHS} = 6(x + 5)$ $\qquad$ $\text{RHS} = 66$

$= 6 \times (8 + 5)$

$= 78$

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

(13) Determine whether $x = 5$ is a solution to the equation $2(x + 7) = 24$:

$\text{LHS} = 2(x + 7)$ $\qquad$ $\text{RHS} = 24$

$= 2 \times (5 + 7)$

$= 24$

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

(14) Determine whether $x = 1$ is a solution to the equation $7(x + 3) = 28$:

$\text{LHS} = 7(x + 3)$ $\qquad$ $\text{RHS} = 28$

$= 7 \times (1 + 3)$

$= 28$

$\therefore$ Since LHS = RHS, $x = 1$ is a solution to the equation.

(15) Determine whether $x = 8$ is a solution to the equation $4(x + 4) = 56$:

$\text{LHS} = 4(x + 4)$ $\qquad$ $\text{RHS} = 56$

$= 4 \times (8 + 4)$

$= 48$

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

(16) Determine whether $x = 3$ is a solution to the equation $2(x + 1) = 8$:

$\text{LHS} = 2(x + 1)$ $\qquad$ $\text{RHS} = 8$

$= 2 \times (3 + 1)$

$= 8$

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

(17) Determine whether $x = 6$ is a solution to the equation $8(x + 10) = 128$:

$\text{LHS} = 8(x + 10)$ $\qquad$ $\text{RHS} = 128$

$= 8 \times (6 + 10)$

$= 128$

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

(18) Determine whether $x = 6$ is a solution to the equation $6(x + 3) = 54$:

$\text{LHS} = 6(x + 3)$ $\qquad$ $\text{RHS} = 54$

$= 6 \times (6 + 3)$

$= 54$

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

(19) Determine whether $x = 8$ is a solution to the equation $10(x + 2) = 90$:

$\text{LHS} = 10(x + 2)$ $\qquad$ $\text{RHS} = 90$

$= 10 \times (8 + 2)$

$= 100$

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

(20) Determine whether $x = 1$ is a solution to the equation $2(x + 9) = 20$:

$\text{LHS} = 2(x + 9)$ $\qquad$ $\text{RHS} = 20$

$= 2 \times (1 + 9)$

$= 20$

$\therefore$ Since LHS = RHS, $x = 1$ is a solution to the equation.