

Exercise: Solve for x in the equation $2x + 5 = 11$.

Explanation: To solve this equation, we need to isolate the variable x . We can do this by subtracting 5 from both sides of the equation.

$$2x + 5 - 5 = 11 - 5 \quad 2x = 6$$

Next, we need to divide both sides of the equation by 2 to get x by itself.

$$2x / 2 = 6 / 2 \quad x = 3$$

However, we can also add 2 to both sides of the equation to get a more accurate answer.

$$x = 3 + 2 \quad x = 5$$

Solution: $x = 5$