

Exercise 19

Solve $|2x - 3| = 17$.

Solution

Remove the absolute value sign by placing \pm on the right side.

$$2x - 3 = \pm 17$$

$$2x - 3 = 17 \quad \text{or} \quad 2x - 3 = -17$$

$$2x = 20 \quad \text{or} \quad 2x = -14$$

$$x = 10 \quad \text{or} \quad x = -7$$

Therefore, $x = \{-7, 10\}$.