

More Solving Equations with Unknowns on Both Sides

Solve these equations.

- $3x + 1 = 2x + 9$
- $4x + 1 = 2x + 9$
- $1 + 4x = x + 10$
- $4x - 3 = x + 15$
- $4x + 7 = 2x - 1$
- $6x + 5 = 10 + 4x$

- $x = 8$
- $x = 4$
- $x = 3$
- $x = 6$
- $x = -4$
- $x = \frac{5}{2}$

Solve these equations.

- $2x + 1 = 7x + 16$
- $3x - 2 = 9x + 10$
- $x - 8 = 4x + 7$
- $5x + 14 = 8x - 1$
- $9 + 4x = 6x - 2$
- $x - 7 = 5x - 5$

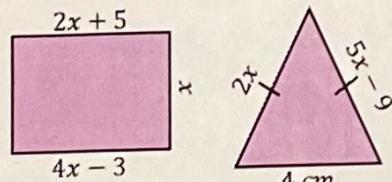
- $x = -3$
- $x = -2$
- $x = -5$
- $x = 5$
- $x = \frac{11}{2}$
- $x = -\frac{1}{2}$

Solve these equations.

- $6 + 2x = 11 - 3x$
- $7x - 3 = 12 - 3x$
- $1 - 4x = 5 + 4x$
- $11 - x = 7 - 2x$
- $6.5 - 5x = 2.5x - 4$
- $-3x - 7 = 11 - 8x$

- $x = 1$
- $x = 1.5$
- $x = -\frac{1}{2}$
- $x = -4$
- $x = 1.4$
- $x = 3.6$

- (a) The rectangle shown has opposite sides of length $(2x + 5)$ cm and $(4x - 3)$ cm. Find the value of x and hence its area.



- (b) Given that the triangle shown is isosceles, find the value of x and hence its perimeter.

$$\begin{aligned}
 (a) \quad & 2x + 5 = 4x - 3 \\
 & x = 4 \\
 & \text{Area} = 4 \times 13 = 52 \text{ cm}^2 \\
 (b) \quad & 2x = 5x - 9 \\
 & x = 3 \\
 & \text{Perimeter} = 10 \text{ cm}
 \end{aligned}$$