



Forming and solving equations

Example

The perimeter of a rectangle is 24 cm . Find x .

$$L + W + L + W = \text{Perimeter}$$

$$x + 4 + x + 4 = 24\text{ cm}$$

Collect like terms

$$x + x + 4 + 4 = 24\text{ cm}$$

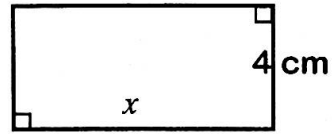
$$2x + 8 = 24\text{ cm}$$

Subtract 8 from each side

$$2x + 8 - 8 = 24 - 8$$

$$\text{Divide both sides by } 2. \frac{2x}{2} = \frac{16}{2}$$

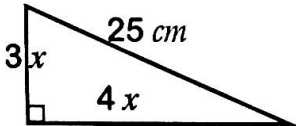
$$x = 8\text{ cm}$$



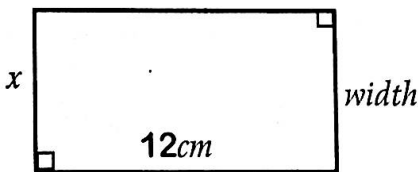
Exercise 14:32

Find the values of the unknown letter.

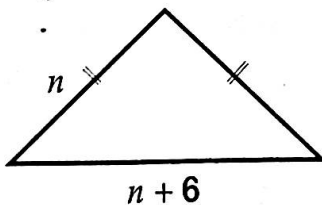
1. The perimeter of the triangle below is 60 cm . Find x .



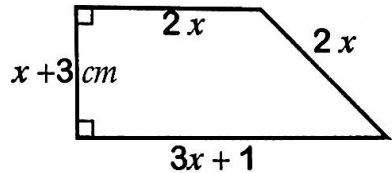
2. The perimeter of the rectangle below is 34 cm . Find the *width* if the length is 12 cm .



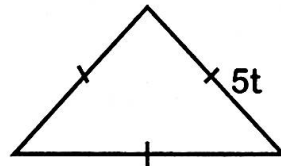
3. The perimeter of an isosceles triangle below is 36 cm . Find n .



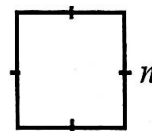
5. The perimeter of the trapezium below is 44 cm . Find x .



6. The perimeter of the triangle below is 75 cm . Find t .



7. The perimeter of the square below is 24 cm . Find n in cm .



4. The perimeter of the square of side $p\text{ cm}$ is 28 cm . Find p .

8. The perimeter of a rectangle is 40 cm . Its length is $x + 4\text{ cm}$ and the width is $x\text{ cm}$. Find x .