

Problem 1

Expand $x(x+5)$

Simplify

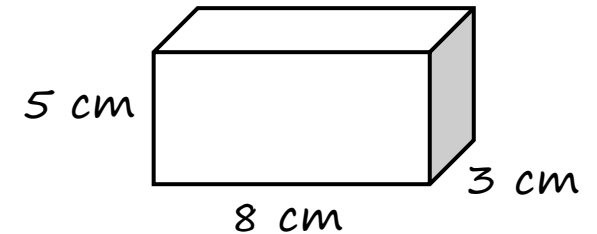
$$5x + x^2 + 8x + 3 + x^2$$

Write an expression for:

6 less than x

half of x

Calculate the surface area of the cuboid



A cuboid of length x , width 5 less than x and a height of half the length has a surface area of 250 cm^2 .

$$\text{Show that } 4x^2 - 15x - 250 = 0$$

Problem 1

ANSWERS

Expand $x(x+5)$

$$x^2 + 5x$$

Simplify

$$5x + x^2 + 8x + 3 + x^2$$

$$2x^2 + 13x + 3$$

Write an expression for:

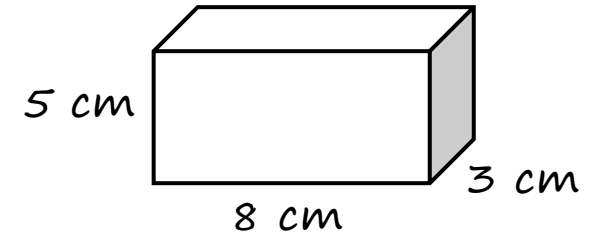
6 less than x

$$x - 6$$

half of x

$$\frac{1}{2}x$$

Calculate the surface area of the cuboid



$$2 \times (5 \times 8 + 5 \times 3 + 8 \times 3) \\ = 158 \text{ cm}^2$$

A cuboid of length x , width 5 less than x and a height of half the length has a surface area of 250 cm^2 .

$$2(x(x-5) + x(\frac{1}{2}x) + \frac{1}{2}x(x-5)) = 250$$

$$2x^2 - 10x + x^2 + x^2 - 5x - 250 = 0$$

$$\text{Show that } 4x^2 - 15x - 250 = 0$$