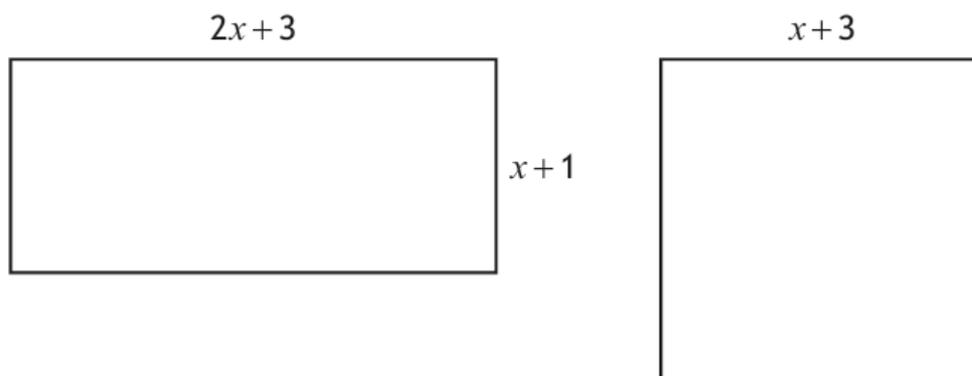


The diagrams of a rectangle and square are shown below.
All measurements are in centimetres.



- (a) Find an expression for the area of the **rectangle**. 1
- (b) Given that the area of the rectangle is equal to the area of the square, show that $x^2 - x - 6 = 0$. 2
- (c) Hence find, algebraically, the length and breadth of the rectangle. 3

Answers:

- (a) $(2x + 3)(x + 1)$ or equivalent
- (b) Proof: see marking instructions.
- (c) 9 cm and 4 cm