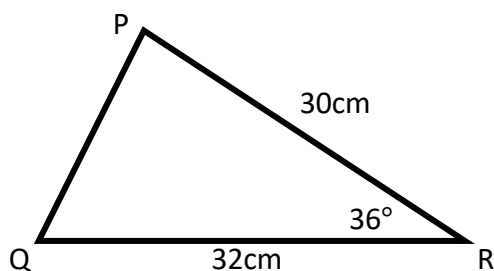8. A tank has 350 litres of water. It starts to be filled at the rate of 6% per hour. How much water will be in the tank after 5 hours?

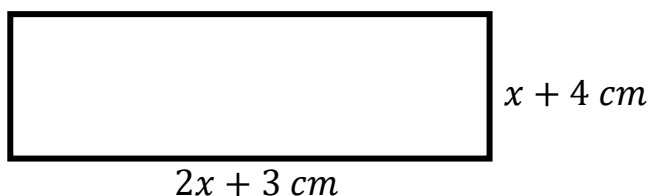9. Calculate the length of the side marked PQ in the triangle below.

10a. Fully factorise

$$3a^2 - 27$$

10b. Simplify

$$\frac{a^2 + 2a - 15}{3a^2 - 27}$$

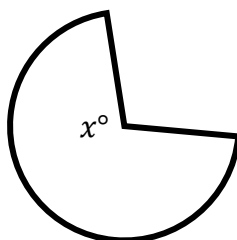11. The area of the rectangle shown below is 42 cm^2

$x + 4\ cm$

$2x + 3\ cm$

a) Show algebraically that

$$2x^2 + 11x - 30 = 0$$

b) Hence, solve the equation and state the length and breadth of the rectangle.

12. The sector below has a radius of 9cm and an area of 188 cm^2. Calculate x.

$x°$

13. Express $x^2 + 8x - 13$ in the form $(x - a)^2 + b$

14. Evaluate 27^a when $x = -\frac{2}{3}$