

Shown is a regular pentagon.

Find angle ABC.

$$540 \div 5 = 108^\circ$$

A empty circular swimming pool has radius 6m and height 2m.
The pool is going to be filled at a rate of 200 litres a minute.

$1\text{m}^3 = 1000$ litres

18 hours 51 mins

How long will it take to fill the pool?

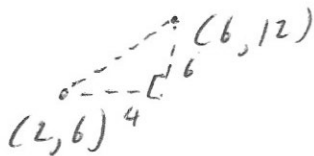
$$\pi \times 6^2 \times 2 = 226.19 \dots \text{m}^3$$

$$226194.6711 \dots \text{ litres}$$

$$\div 200$$

$$= 1130.97 \text{ mins}$$

Work out the gradient of the straight line that passes through (2, 6) and (6, 12).



$$6 \div 4 = 1.5$$

Natalie invests £800 for 2 years at 10% per year compound interest.

How much interest does she earn?

$$800 \times 1.1^2 = 968$$

$$968 - 800$$

$$= \pounds 168$$

A sheet of glass has a mass of 4kg.
The density of the glass is 2.42g/cm^3

Find the volume of the glass.

$$d^m v$$

$$\frac{4000}{2.42} = 1652.9 \text{ cm}^3$$