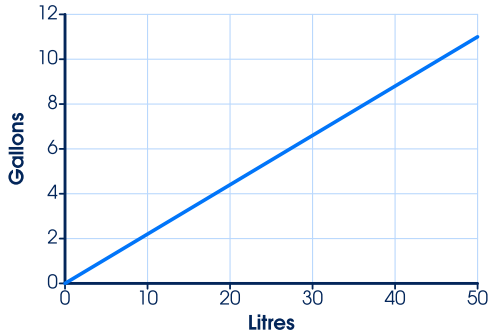
GCSE FOUNDATION · REVISION MAT 5

Real-life graphs

1 The graph converts between litres and gallons.

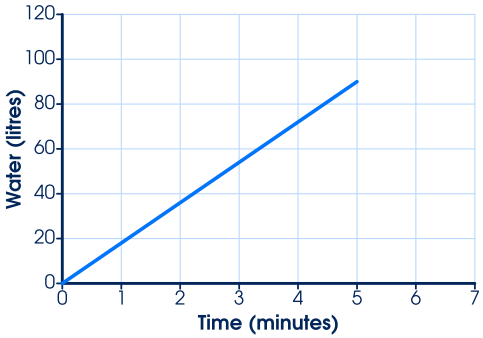


Use the graph to convert

(a) 30 litres to gallons

(b) 8.8 gallons to litres

2 The graph shows the water in a tank as it fills.



(a) How much water is in the tank after 2 minutes?

(b) At what rate does the tank fill?

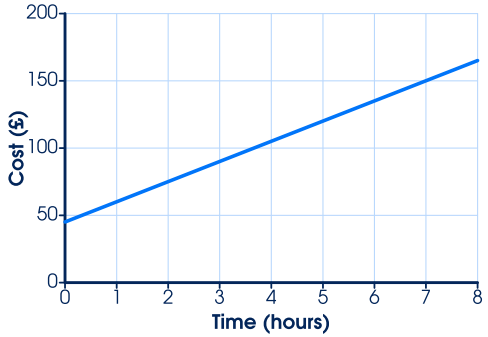
3 1 litre = 0.22 gallons

A conversion graph between these units is a straight line through (0, 0).

(a) Explain why it goes through (0, 0).

(b) Show that 50 litres = 11 gallons

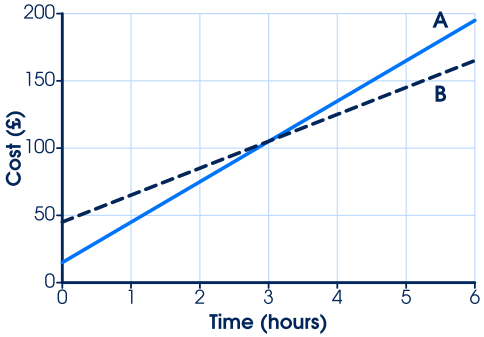
4 The graph shows what a plumber charges.



(a) What does the point where the line meets the cost axis tell you?

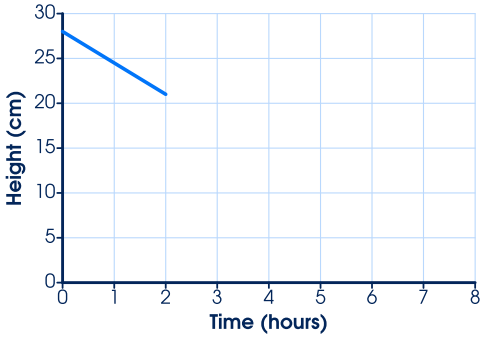
(b) How much does the plumber charge for each extra hour?

5 The graph shows the cost of hiring a bike from two shops, A and B.



For which numbers of hours is shop A cheaper? Explain how you know.

6 A candle is lit. The graph shows its height for the first few hours.



The candle keeps burning at the same rate.

How many hours after it is lit will it burn out?

ANSWERS · REVISION MAT 5

Real-life graphs

1 (a) about **6.6**

(b) about **40**

(allow readings close to these)

2 (a) **36 litres**

(b) **18 litres per minute**

3 (a) **0** of one unit is 0 of the other.

(b) 50 × 0.22 = 11 gallons ✓

4 (a) A fixed call-out charge of **£45**, even for 0 hours.

(b) **£15** per hour (the gradient).

5 The lines cross at 3 hours.

Shop A is cheaper for **less than 3 hours**, where line A is below line B.

6 It burns 3.5 cm per hour.

28 ÷ 3.5 = 8

8 hours

Mr&Mrs MATHS