

Real-Life and Conversion Graphs

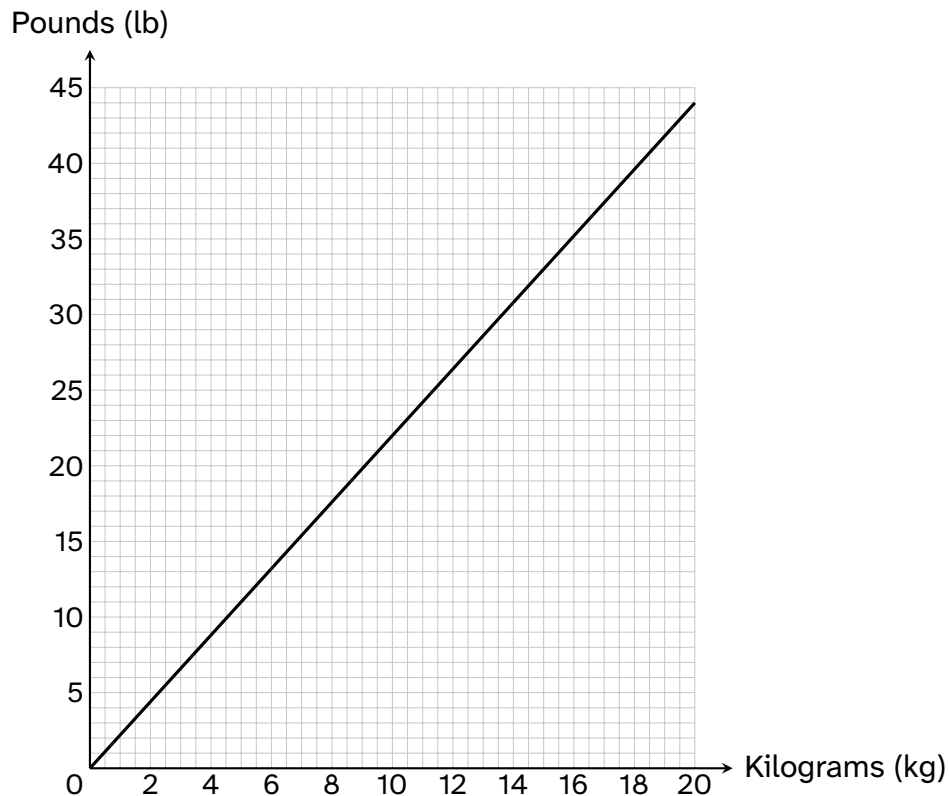
For Pearson Edexcel GCSE Mathematics (1MA1) • Foundation tier

Name _____

Total marks: **22**

Answer **all** questions in the spaces provided. Show your working: marks are given for correct method.

- 1** You can use this graph to change between kilograms (kg) and pounds (lb).



- (a) Use the graph to change 15 kg to pounds.

..... lb
(1)

- (b) Use the graph to change 11 pounds to kilograms.

..... kg
(1)

- (c) Jake's suitcase weighs 55 pounds.
The airline's weight limit for one suitcase is 23 kg.
Is Jake's suitcase over the weight limit?
You must show how you get your answer.

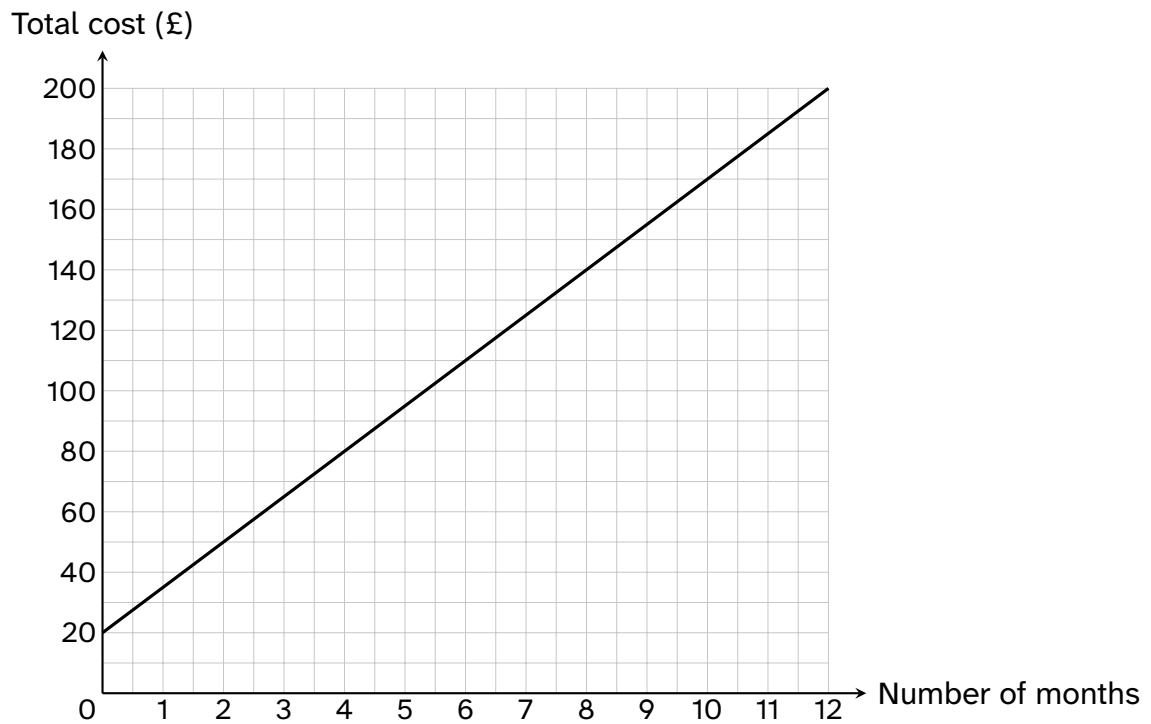
(2)

- (d) A school kitchen needs 12 pounds of potatoes.
Potatoes are sold in 2.5 kg bags.
How many bags of potatoes does the kitchen need to buy?

.....
(2)

(Total for Question 1 is 6 marks)

- 2 FitZone gym charges a joining fee and then a fee for each month. The graph shows the total cost of being a member of FitZone for up to 12 months.



- (a) Use the graph to find the total cost of 6 months at FitZone.

£
(1)

- (b) Work out the monthly fee at FitZone.

£
(2)

- (c) PowerHouse gym charges £18 each month and has no joining fee.
Hana wants to be a member of a gym for 12 months.
Which gym is cheaper for Hana?
You must show how you get your answer.

.....

(2)

(Total for Question 2 is 5 marks)

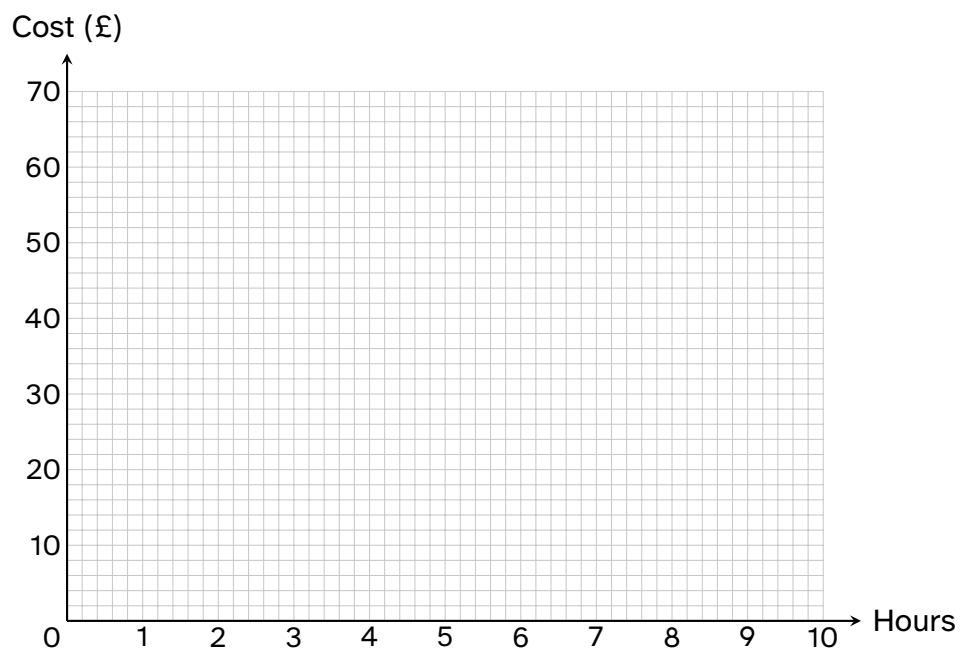
3 A company charges £12 plus £5 per hour to hire a canoe.

(a) Complete the table.

Hours	0	2	5	8
Cost (£)				

(2)

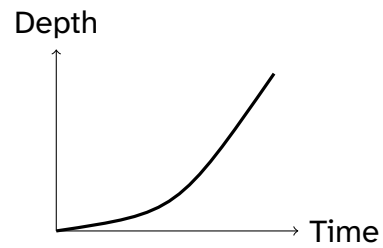
(b) On the grid, draw a graph to show the cost of hiring a canoe for up to 10 hours.



(2)

(Total for Question 3 is 4 marks)

4 Here is a graph.

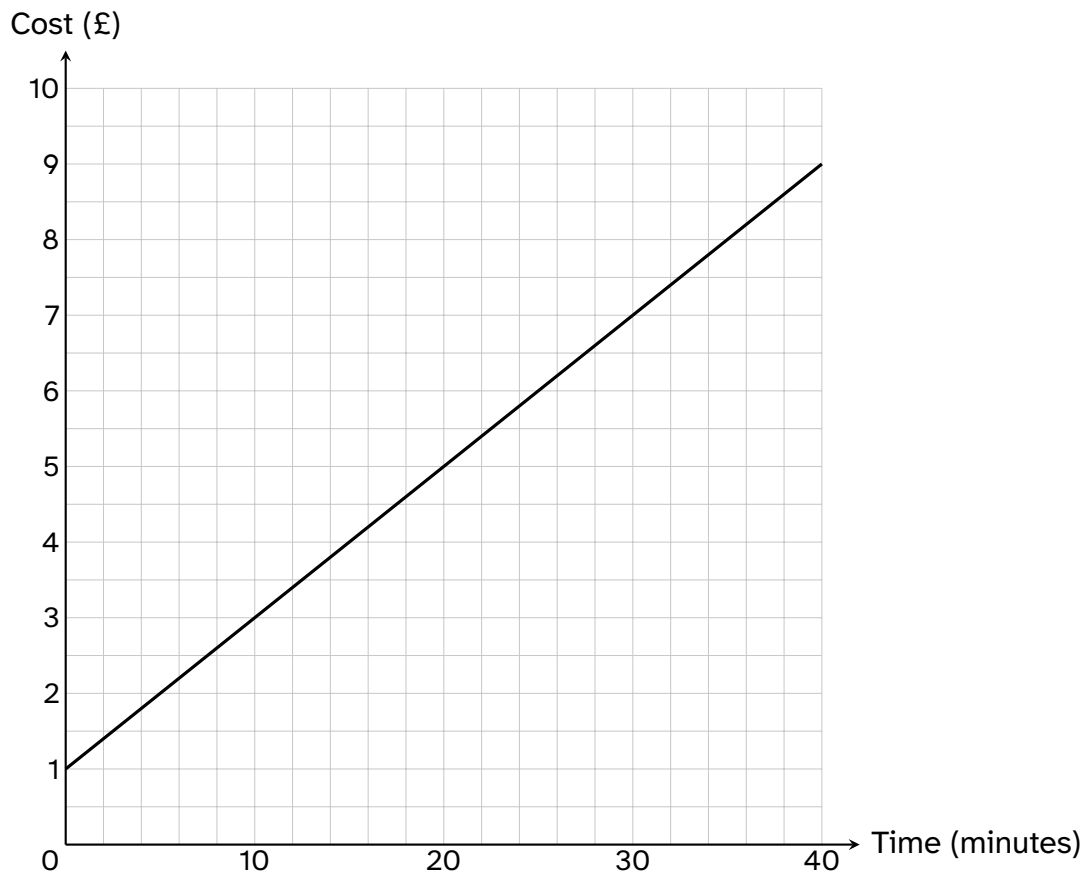


Explain why this graph could **not** show the depth of water in a bath being filled at a constant rate.

(1)

(Total for Question 4 is 1 mark)

- 5 The cost of hiring an electric scooter is an unlock fee plus a charge for each minute. This graph can be used to find the cost of a ride of up to 40 minutes.



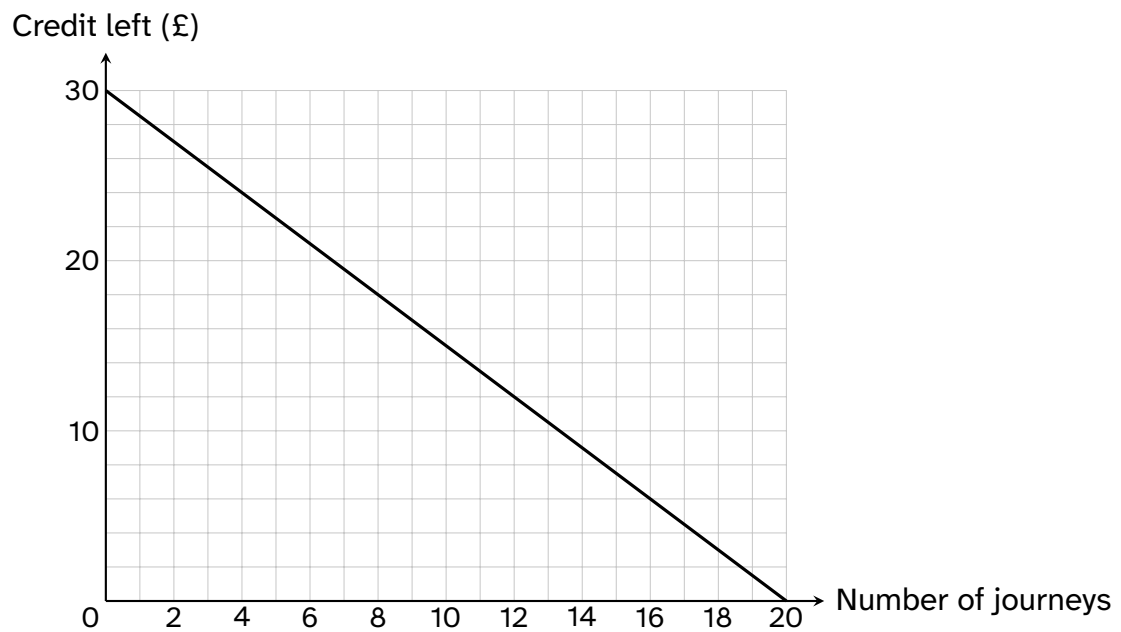
- (a) Use the graph to find the cost of a 30-minute ride.

£
(1)

- (b) Tom starts a ride at 08 47 and ends it at 09 12
Leah pays £5 for her ride.
Who had the longer ride?
You must show how you get your answer.

.....
(3)
(Total for Question 5 is 4 marks)

- 6** Sam puts some credit on his bus pass.
The graph shows the amount of credit left on the pass after each bus journey.



- (a) What does the gradient of this graph represent?

(1)

- (b) How many journeys can Sam make before the credit runs out?

.....
(1)
(Total for Question 6 is 2 marks)