Name: _____

ASM Tuition Academy

Real-Life and Distance Time Graph

Instructions:

* Use blank ink or ballpoint pen.
* Answers all Questions
* Answers the Questions in the space provided
* Diagrams are not accurately drawn unless otherwise indicated
* you must show all your working out

Information:

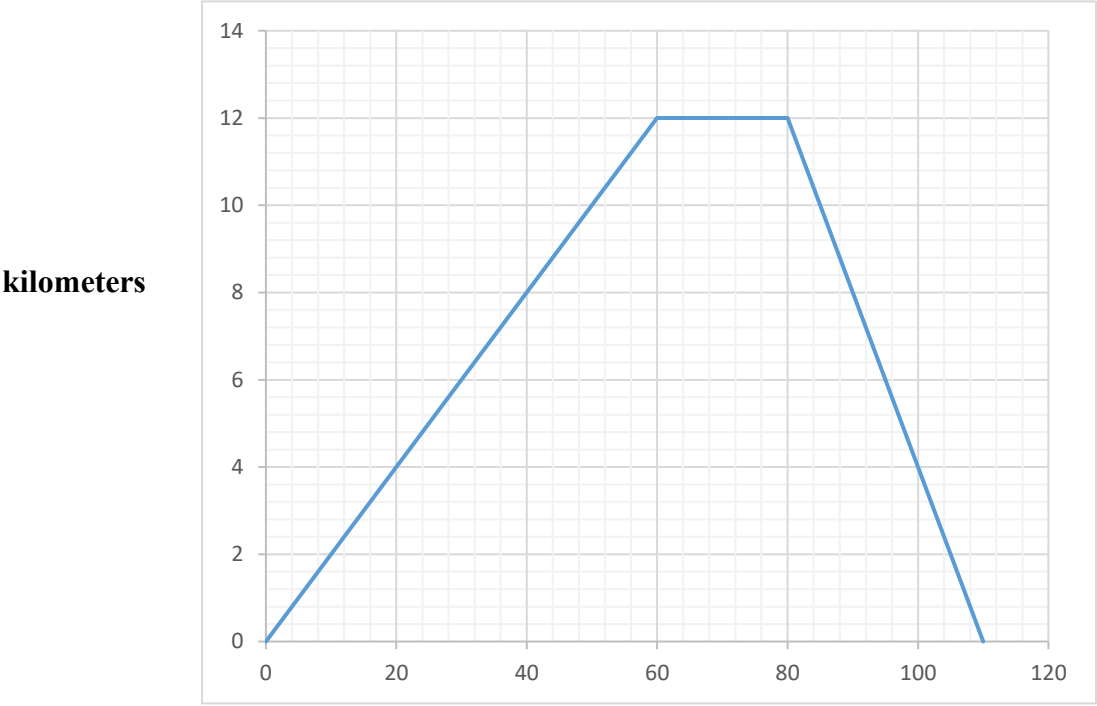
* the marks for each question are shown in brackets

use this as a guide as to how much time to spend on each question

Advise:

* Read each question carefully before you start to answer it
* Keep an eye on the time
* Try to answer every question
* Check your answers if you have time at the end

1. **Hussain went on a bike ride.**
   This graph shows Hussain's distance from the office on his bike ride.



a) **How far had Hussain travelled after 30 minutes?**

_____ **km**

b) **After 60 minutes, Hussain stopped for a rest.**
   For how many minutes did he rest?

_____ **minutes**

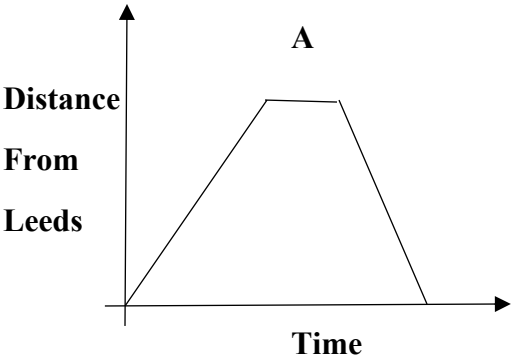
c) **How far did Hussain travel in total?**

_____ **km**

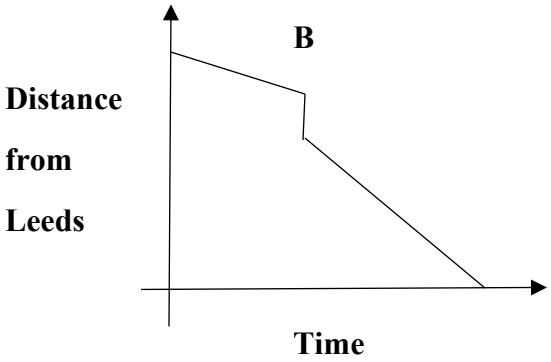
(Total for question 1 is 3 marks)

2. **Umar drove from Leeds to Liverpool.**
   He stopped at a service station for 30 minutes on the way.
   Which of these distance time graphs could represent Umar's journey?

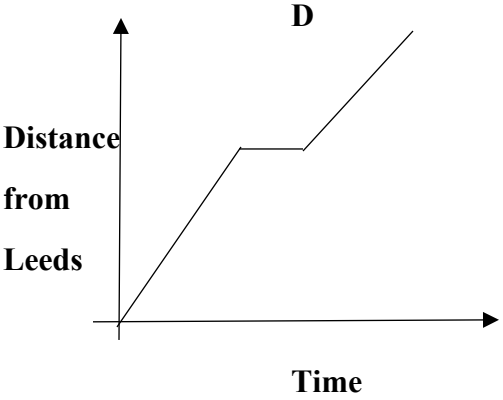
A



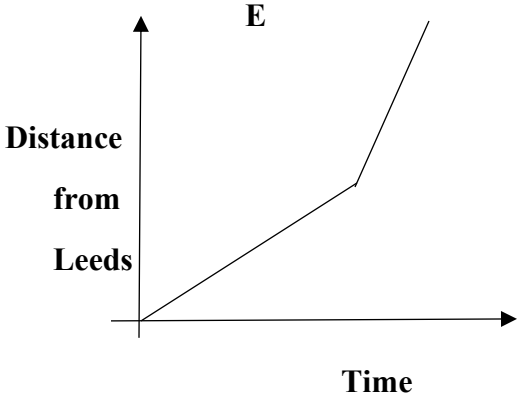
B



D

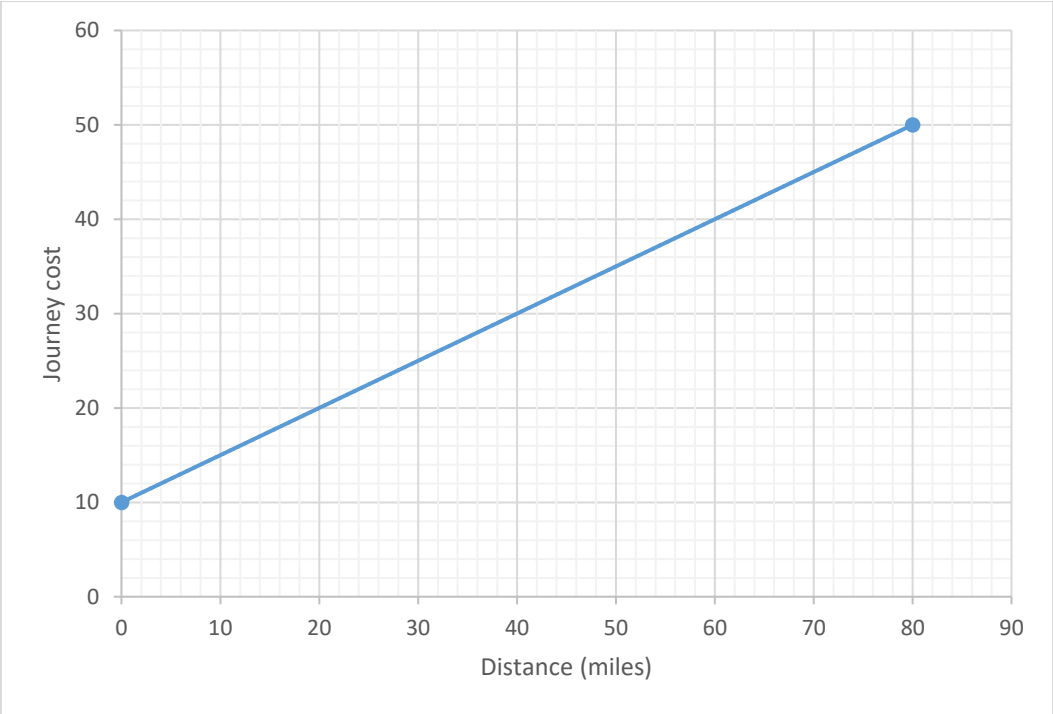


E



(Total for question 2 is 1 marks)

3. Harry is a taxi driver.
You can use this graph to find the cost of a taxi for different distances.



For each journey, there is a fixed charge plus a charge for the distance.

a) How much is the fixed charge?

£_____

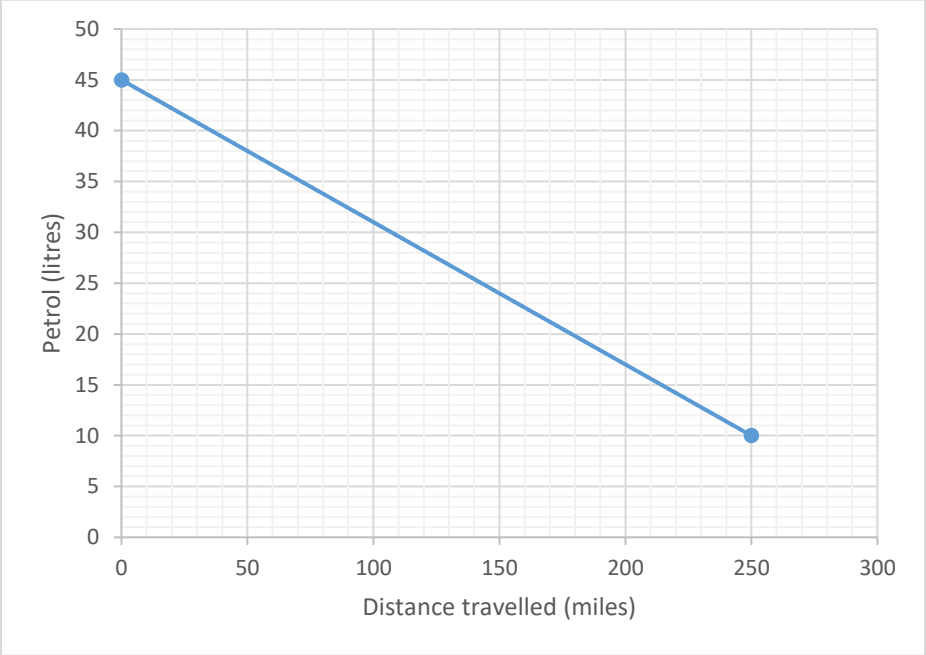
Harry makes two journeys.
The distance of one journey is 20 miles further than the other journey.

b) Work out the difference between the two journey costs

£_____

(Total for question 3 is 3 marks)

4. Sarkan draws a graph showing how much petrol his bus used on a 250-mile journey.



a) How much petrol was in Sarkan's bus at the start of his journey?

_____liters

b) How many more miles can Sarkan's bus travel before it runs out of petrol?

_____miles

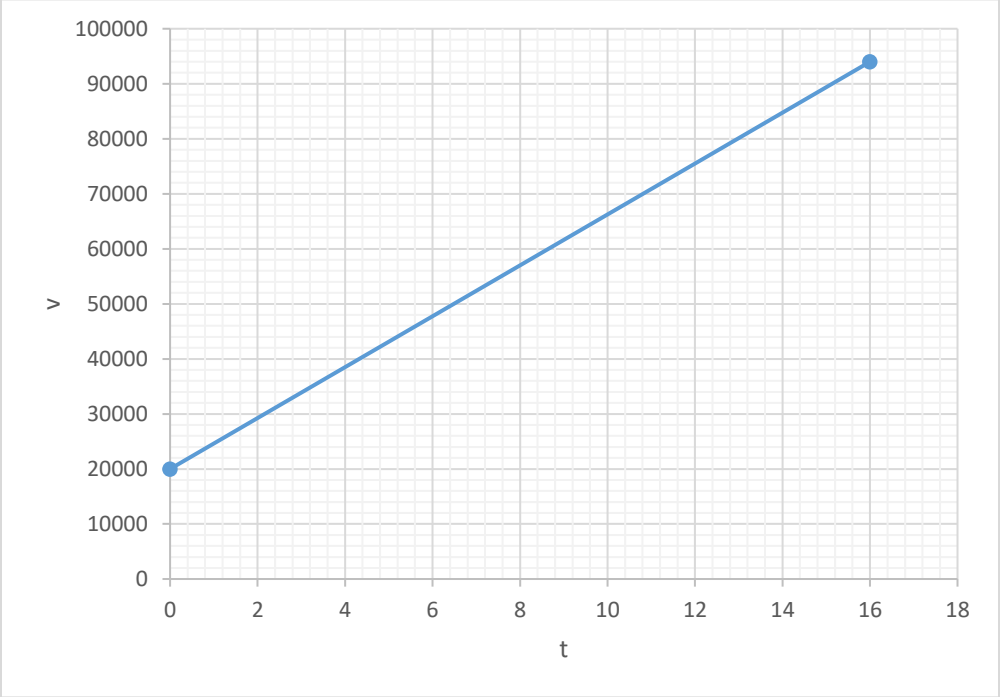
c) What assumption have you made to calculate your answer to (b)?

……

……

(Total for question 4 is 3 marks)

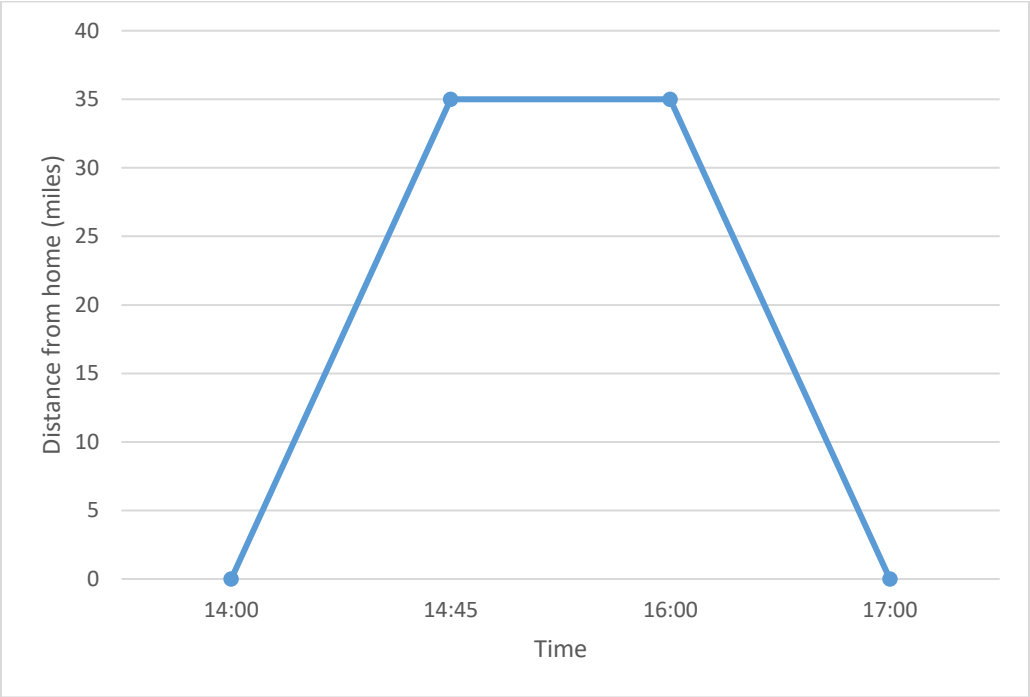
5. **Aliya is filling up a swimming pool.**
The graph shows the volume v of water in the swimming pool at time t hours.



Work out the rate of that the water is flowing into the pool.
Give your answer in liters per hour.

(Total for question 5 is 2 marks)

6. Zoha drove to the beach. She stayed at the beach and then she drove back home. Here is Zoha's travel graph.



a) For how many minutes did Zoha stay at the beach?

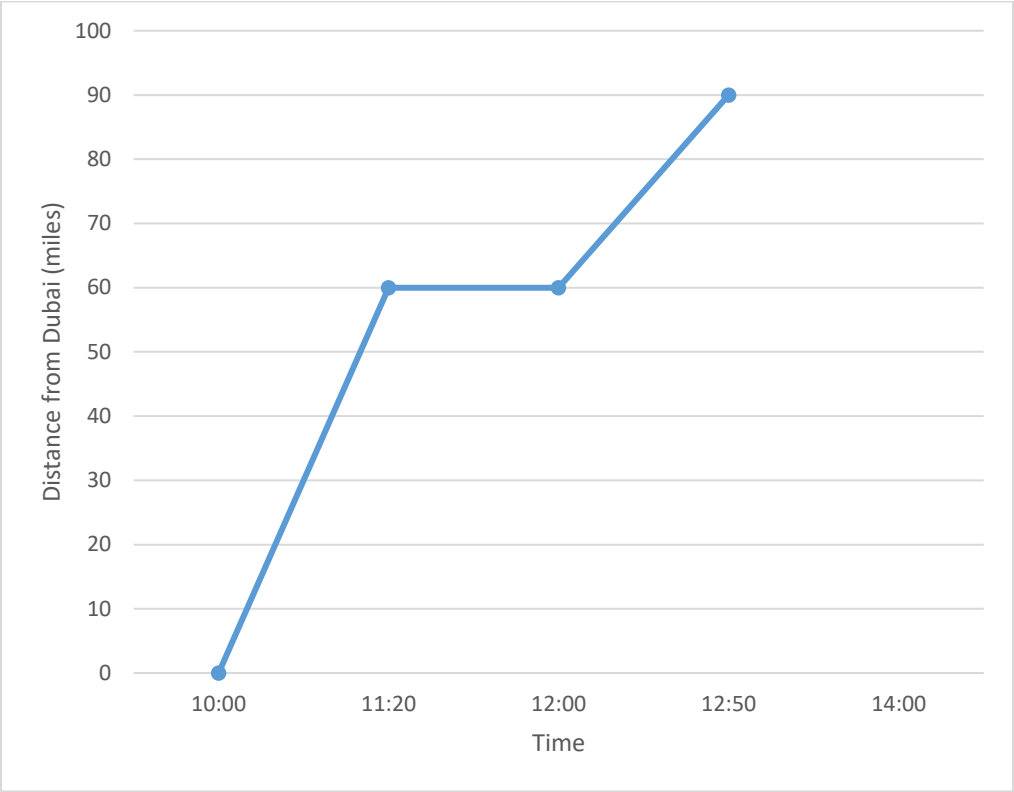
_____**minutes**

b) What was Zoha's average speed on her journey to the beach?

_____**miles/hour**

(Total for question 6 is 3 marks)

7. **Hiba drove from Dubai to Abu Debi. She made one stop at a service station. Here is part of Hiba's travel graph.**



a) **For how many minutes did Hiba stop at the service station?**

_____**minutes**

b) **What was Hiba's average speed between Dubai and the service station?**

_____**miles/hour**

c) **Abu Debi is 120 miles from Dubai.**
Hiba arrived in Abu Debi at 14:00.
Complete the graph

(Total for question 7 is 5 marks)