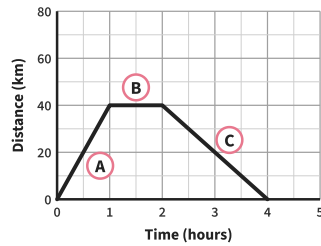


Distance-Time Graphs

ANSWERS

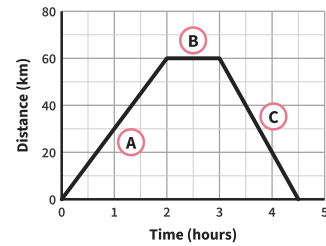
1 Speed = distance ÷ time

Complete the table for parts A, B and C.



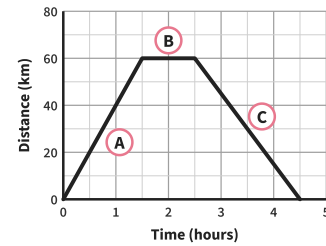
	A	B	C
Time (h)	1	1	2
Distance (km)	40	0	40
Speed (km/h)	40	0	20

2 Complete the table for parts A, B and C.



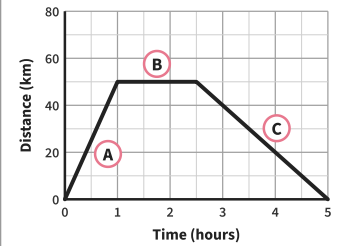
	A	B	C
Time (h)	2	1	1.5
Distance (km)	60	0	60
Speed (km/h)	30	0	40

3 Complete the table for parts A, B and C.



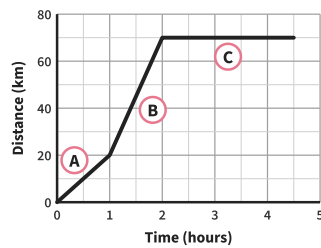
	A	B	C
Time (h)	1.5	1	2
Distance (km)	60	0	60
Speed (km/h)	40	0	30

4 Complete the table for parts A, B and C.



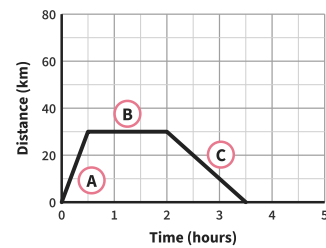
	A	B	C
Time (h)	1	1.5	2.5
Distance (km)	50	0	50
Speed (km/h)	50	0	20

5 Complete the table for parts A, B and C.



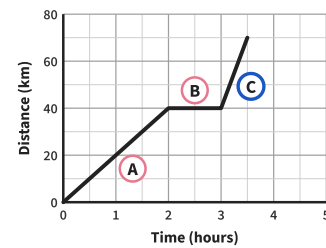
	A	B	C
Time (h)	1	1	2.5
Distance (km)	20	50	0
Speed (km/h)	20	50	0

6 Complete the table for parts A, B and C.



	A	B	C
Time (h)	0.5	1.5	1.5
Distance (km)	30	0	30
Speed (km/h)	60	0	20

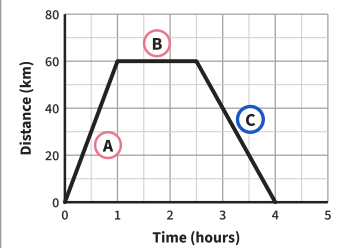
7 Work out the fastest speed.



$$30 \div 0.5 = 60$$

Speed 60 km/h

8 Work out the speed on the way home.



$$60 \div 1.5 = 40$$

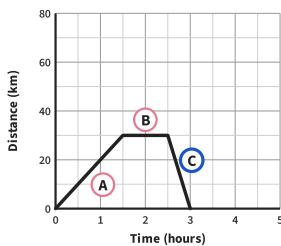
Speed 40 km/h

Distance-Time Graphs further practice

ANSWERS

9

Work out the speed on the way home.

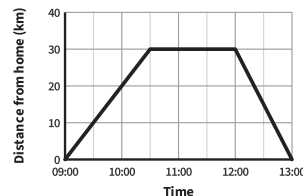


$$30 \div 0.5 = 60$$

Speed 60 km/h

10

Zoe cycles from home to a lake and back. How long does she stop at the lake?

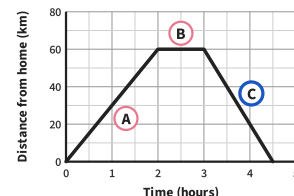


$$10:30 \text{ to } 12:00$$

Answer 1 hour 30 minutes

11

Max drives from home to the beach and back. Is he faster in part A or in part C? Show how you know.

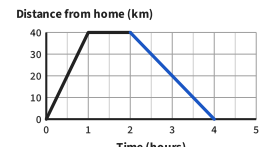


$$A: 60 \div 2 = 30 \quad C: 60 \div 1.5 = 40$$

Answer Part C

12

Amir drives 40 km to a shop and stops there. Then he drives home at 20 km/h. Draw this on the graph. How many hours after he set off does he get home?

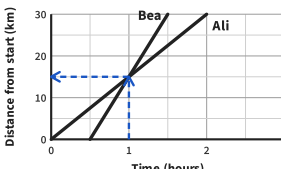


$$40 \div 20 = 2 \text{ hours}$$

Answer 4 hours

13

Ali and Bea cycle the same 30 km route. Bea sets off later than Ali and overtakes him. How far from the start are they when Bea overtakes Ali?

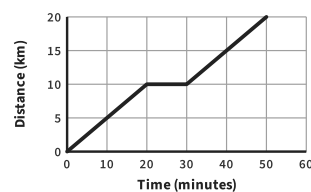


$$\text{the lines cross at } 15 \text{ km}$$

Answer 15 km

14

The graph shows a tram journey. Work out the speed of the tram in the first 20 minutes. Give your answer in km/h.

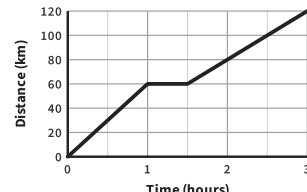


$$10 \text{ km in } 20 \text{ minutes, then } \times 3$$

Answer 30 km/h

15

A coach makes a journey with one stop. Work out its average speed for the whole journey, including the stop.

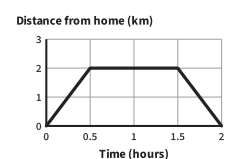


$$120 \text{ km in } 3 \text{ hours, } 120 \div 3$$

Answer 40 km/h

16

Lily says the graph shows Sam walking up a hill, along the top and down again. Is she right? Explain.



$$\text{distance from home, not height}$$

$$\text{he walks } 2 \text{ km, stops, then walks home}$$

Answer No