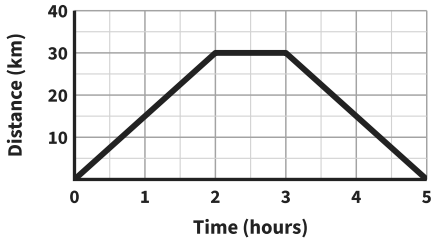
Distance-time graphs

ANSWERS

1

Find the speed on the way out.



distance = 30 km

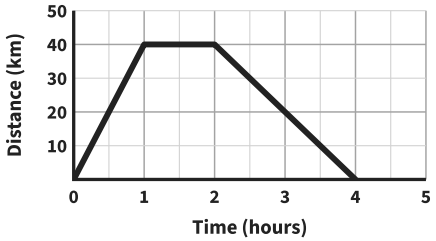
time = 2 hours

speed = 30 ÷ 2

Speed (km/h) 15

2

Find the speed on the way back.



distance = 40 km

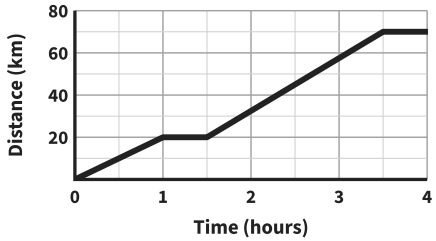
time = 2 hours

speed = 40 ÷ 2

Speed (km/h) 20

3

Find the speed from 1.5 to 3.5 hours.



distance = 50 km

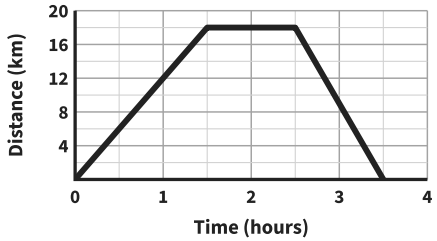
time = 2 hours

speed = 50 ÷ 2

Speed (km/h) 25

4

Find the speed on the way out.



distance = 18 km

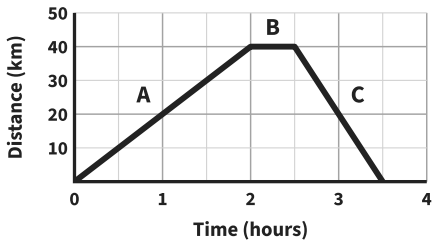
time = 1.5 hours

speed = 18 ÷ 1.5

Speed (km/h) 12

5

Which part, A, B or C, is the fastest?
Work out its speed.



C: the steepest line

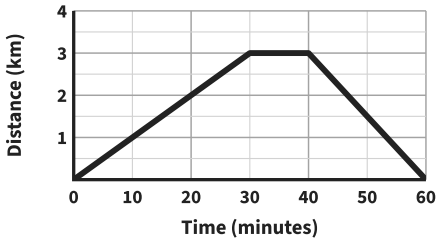
speed = 40 ÷ 1

Part C

Speed (km/h) 40

6

Mia walks to the shops and back.
Find her speed on the way there, in km/h.



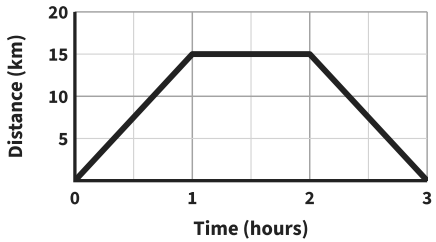
time = 30 minutes = ½ hour

speed = 3 ÷ ½

Speed (km/h) 6

7

Tom says he cycled at a steady speed from 1 to 2 hours, as the line is flat.
Explain why Tom is wrong.

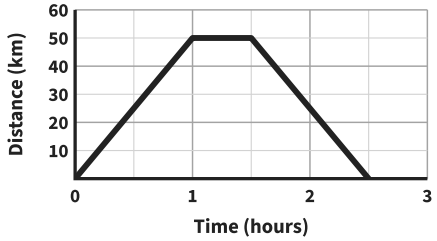


Still 15 km from home: he has stopped

Speed (km/h) 0

8

A van stops at a warehouse.
How many minutes does it stop for?
Find its speed on the way back.



stop = ½ hour

speed = 50 ÷ 1

Stop (minutes) 30

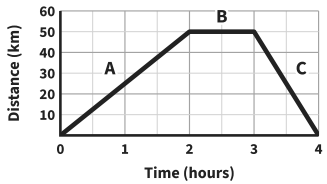
Speed back (km/h) 50

Distance-time graphs *further practice*

ANSWERS

9

Find the speed in part A and in part C.



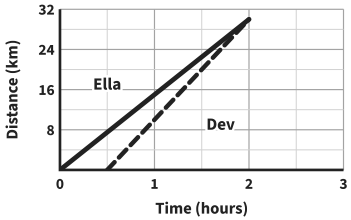
A: 50 ÷ 2 = 25

C: 50 ÷ 1 = 50

Answer A 25 km/h, C 50 km/h

10

Ella and Dev cycle the same path from home. Dev sets off later.
Who cycles faster?
Show how you know.



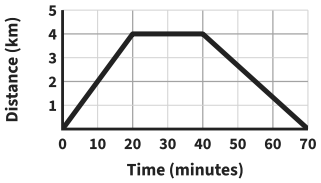
Ella: 30 ÷ 2 = 15 km/h

Dev: 30 ÷ 1.5 = 20 km/h

Answer Dev

11

Noor cycles to the library and back.
Find her speed on the way home, in km/h.



30 minutes = ½ hour

4 ÷ ½ = 8

Answer 8 km/h

12

A train travels 90 km in 45 minutes.
Find its speed in km/h.

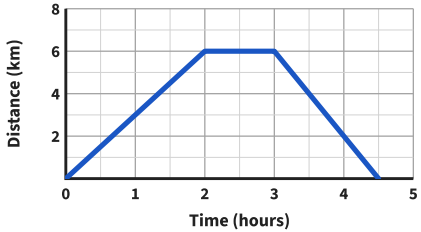
45 minutes = ¾ hour

30 km every 15 minutes, × 4 = 120

Answer 120 km/h

13

Kim walks 6 km from home in 2 hours.
She stops for 1 hour, then walks home in 1.5 hours. Draw her distance time graph.



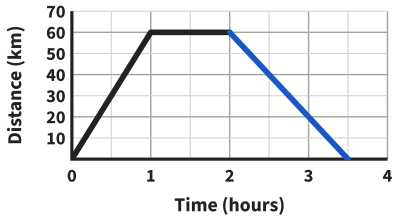
up to 6 km at 2 hours, flat to 3 hours

down to 0 at 4.5 hours

Answer on the graph

14

Pat drives to a garden centre.
After the stop, Pat drives home at 40 km/h.
Complete the graph. How many hours after setting off does Pat get home?



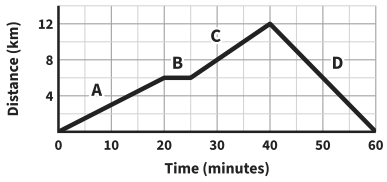
60 ÷ 40 = 1.5 hours to get home

2 + 1.5 = 3.5

Answer 3.5 hours

15

The graph shows a bus journey.
Which part is the fastest? Work out its speed in km/h.



D: 12 km in 20 minutes, ⅓ hour

12 × 3 = 36

Answer D, 36 km/h

16

Zak walks 4 km in 30 minutes.
He says his speed is 4 ÷ 30, which is less than 1 km/h. Explain his mistake.
Find his speed.

30 is minutes: 30 minutes = ½ hour

4 ÷ ½ = 8, twice as far in an hour

Answer 8 km/h