

Distance-Time Graphs

Video 171 on www.corbettmaths.com

Examples





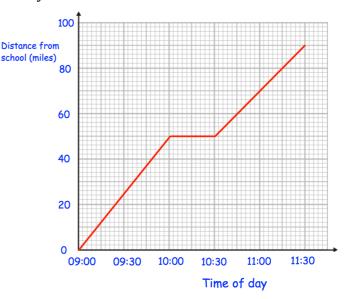
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Workout

Question 1: The distance-time graph shows class 8A's journey to the zoo. They stopped for a picnic on the way to the zoo.

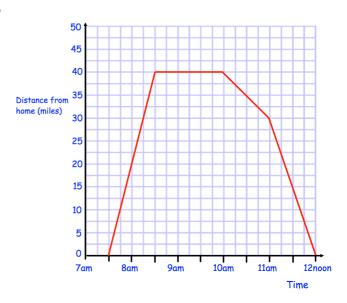
- (a) What time did the bus leave school?
- (b) What time did they stop for a picnic?
- (c) How far had they travelled when they stopped for a picnic?
- (d) How long did they stop for?
- (e) What time did they arrive at the zoo?
- (f) How far is the zoo from school?



Question 2: Emma travelled to her Grandmother's house and back.

The distance-time graph shows information about her journey.

- (a) What time did Emma begin her journey?
- (b) How far was Emma from home at 8am?
- (c) How long did Emma stay at her Grandmother's house?
- (d) What time did Emma leave her Grandmother's house?
- (e) How far was Emma from home at 11:45?
- (f) How far did Emma travel in total?





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320

160

80

Distance from

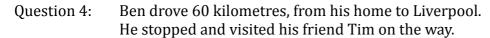
Milton (miles) 240

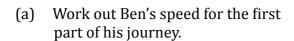
Question 3: A train travels from Milton to Redville, stops for 30 minutes, then travels to Leek.

- (a) How long did it take the train to travel from Milton to Redville?
- (b) How far is Redville from Milton?
- (c) Work out the speed of the train for the journey from Milton to Redville.
- (d) How long did it take the train to travel from Redville to Leek?

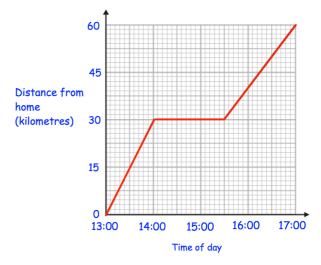


(f) Work out the speed of the train for the journey from Redville to Leek.





- (b) How long did Ben spend visiting Tim?
- (c) Work out Ben's speed for the last part of his journey.



10:00

Time

11:00

Question 5: Laura goes for a cycle from her house to the post office, 4km away.

- (a) How long did it take Laura to cycle to the post office?
- (b) Work out Laura's speed cycling to the post office.
- (c) How long did Laura spend at the post office?
- (d) Work out Laura's speed cycling back home.





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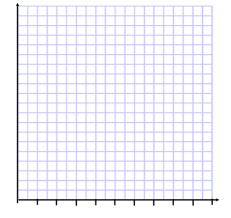
Question 1:

Erin leaves home at 11am.

She cycles at a speed of 16 miles per hour for 90 minutes. She stops for half an hour.

Erin then cycles home and arrives at 3pm.

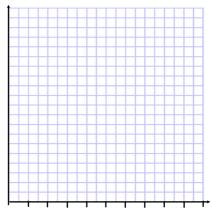
- (a) Draw a distance-time graph to show Erin's journey.
- (b) What is Erin's average speed on the return part of her cycle?



Question 2:

Thomas leaves home at 14:00 He drives at an average speed of 40mph for $3\frac{1}{2}$ hours Thomas stops for 30 minutes. He then drives home at an average speed of 70mph.

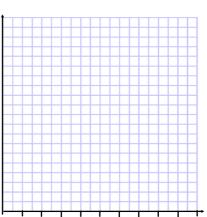
Draw a distance-time graph to show Thomas's journey



Question 3:

A helicopter leaves Bristol at 10:00. It flies for 45 minutes at 80km/h. It lands for 30 minutes and then flies a further 65 kilometres in 30 minutes. The helicopter then immediately returns to its base in Bristol, flying at 100km/h.

Draw a distance-time graph to show the journey.



Answers





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