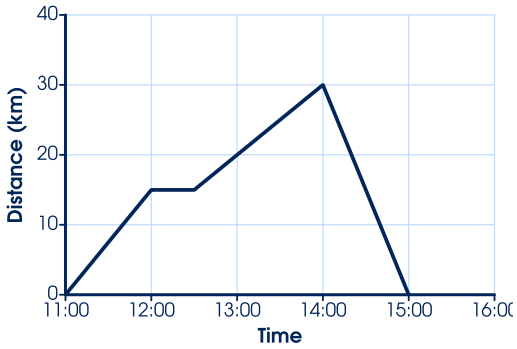
GCSE FOUNDATION · REVISION MAT 4

Distance-time graphs

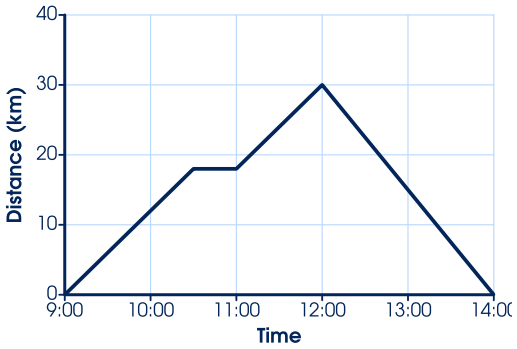
1 The graph shows Uma's cycle ride.



(a) How far had Uma travelled at 11:30?

(b) For how many minutes did Uma stop?

2 The graph shows Vince's cycle ride.



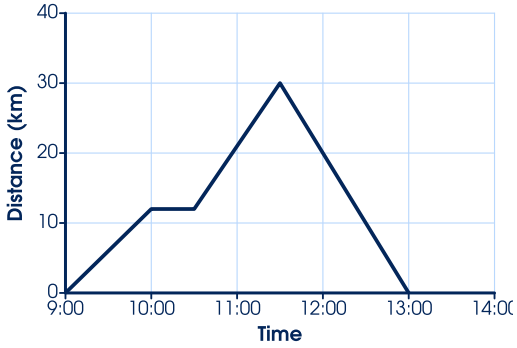
Work out the speed for the first part of the ride.

3 A distance–time graph has a horizontal section.

(a) Explain what a horizontal section shows.

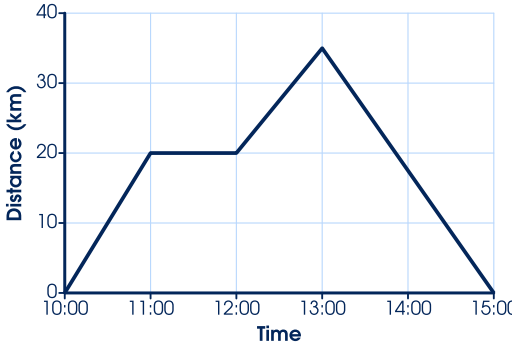
(b) Explain what a steeper line shows.

4 The graph shows Ravi's cycle ride.



Show that the speed on the way home was 20 km/h.

5 The graph shows Sofia's cycle ride.



On which part of the ride was the speed greatest? Show how you decide.

6 Jo leaves home at 7:45.

She drives 25 km in 0.5 hours, stops for 15 minutes, then drives home at 50 km/h.

What time does she get home?

ANSWERS · REVISION MAT 4

Distance-time graphs

1 (a) **7.5 km**

(b) **30 minutes**

2 18 km ÷ 1.5 h = **12 km/h**

3 (a) The distance is not changing, so the person is **stopped**.

(b) More distance is covered in the same time, so they are **moving faster**.

4 Distance 30 km in 1.5 hours

30 ÷ 1.5 = 20 km/h ✓

5 Out (1st part): 20 km/h
Out (2nd part): 15 km/h
Home: 17.5 km/h

Greatest on **the first part of the way out**

6 Home journey: 25 ÷ 50 = 0.5 h = 30 min

Total: 30 + 15 + 30 = 75 min

Home at **9:00**