

## 2.6 Distance Time Graphs

### 1) The Corner Store

At 11 o'clock, Micha's mother sends him to the corner store for milk and tells him to be back in 30 minutes. Examine the graph and answer the questions on a separate sheet.

1. How long did it take Micha to reach the store?

16 minutes

2. How long did Micha stay at the store?

4 minutes

3. How long did it take Micha to get home from the store?

~~4 minutes~~ 20 min

4. How can you use the graph to tell which direction Micha is travelling?

rising line = away from home

falling line = towards home.

5. How far did Micha travel in the segment BC?

200 m

6. How long did it take Micha to travel segment BC?

8 minutes

7. What was Micha's speed (in m/min) during segment BC?

25 m/min

8. Calculate Micha's speed during segment EF.

100 m in 8 min = 12.5 m/min.

9. How could you tell (without calculations) that Micha was travelling faster during BC than EF?

The line is steeper.

10. When is Micha travelling the fastest? Explain.

AB and CD are the steepest. 50 m/min.

11. When is Micha travelling the slowest? Explain.

DE Micha is not moving. 0 m/min

12. Did Micha make it home in 30 minutes? How do you know?

No it took 40 minutes.

