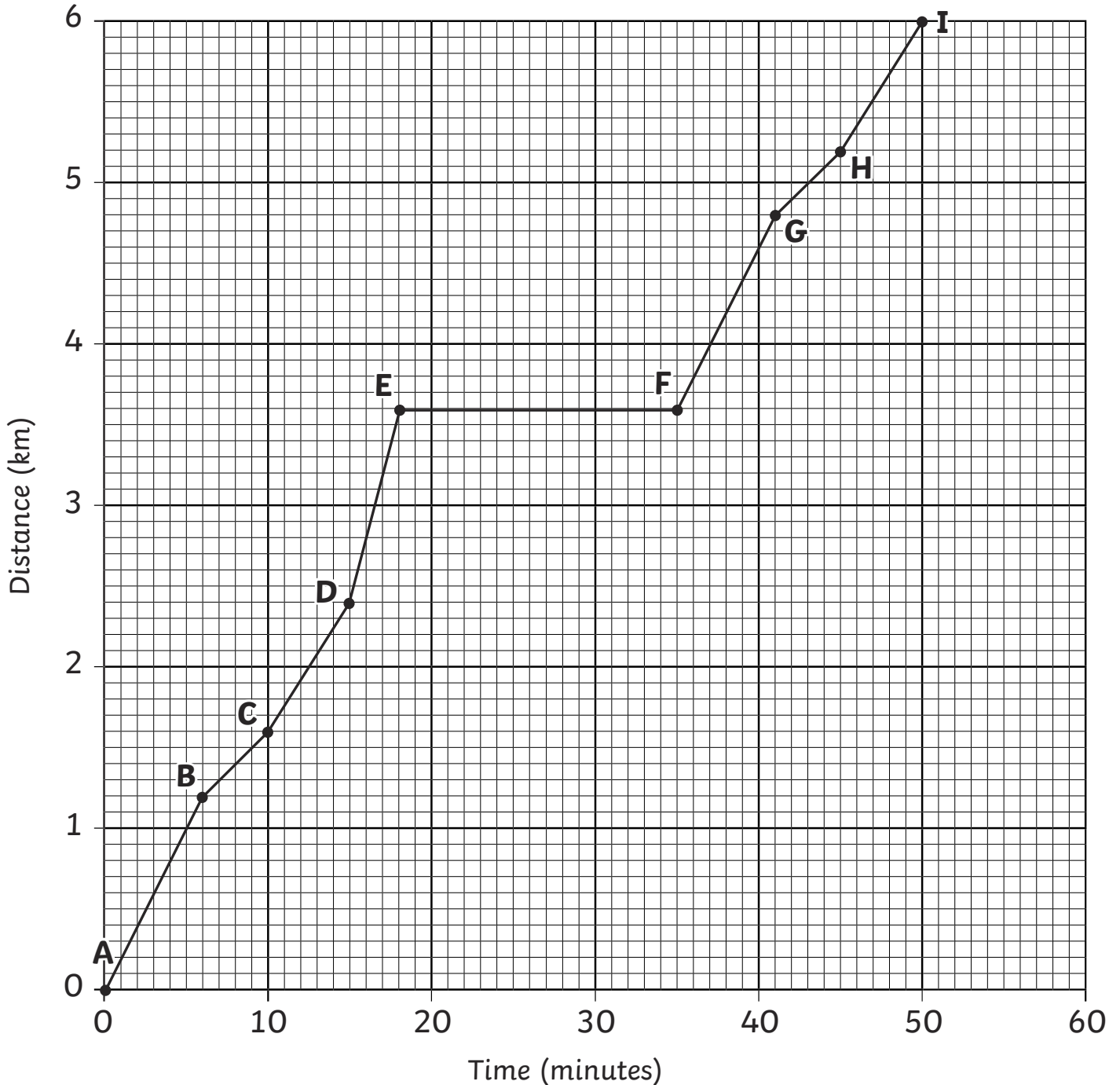


Extra Challenge

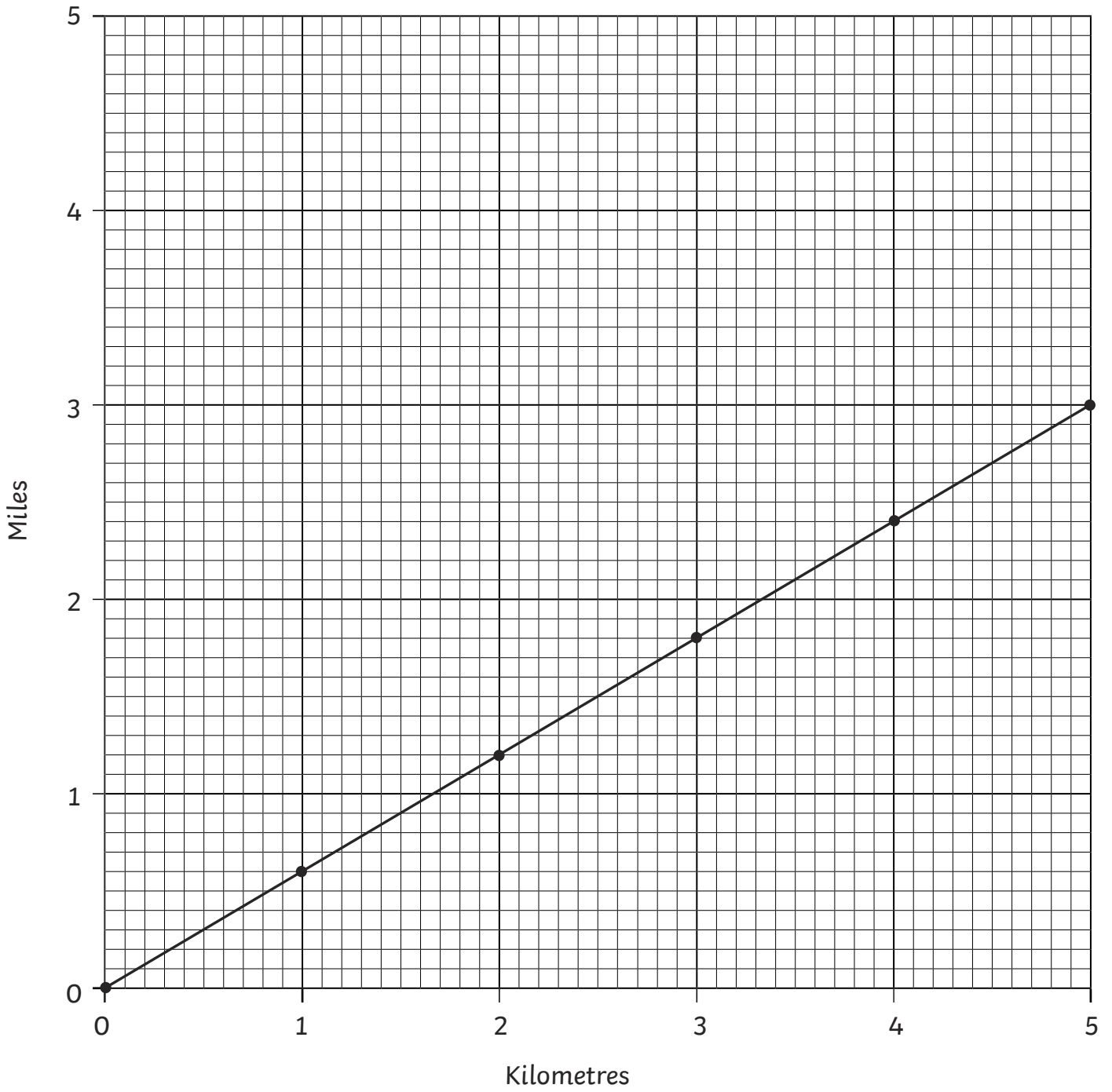
I can read and interpret line graphs.



A Line Graph to Show How Far James Cycled



A Straight-Line Graph Converting Kilometres to Miles



Use the line graph showing how far James cycled over 50 minutes and the straight-line graph converting km to miles to answer these questions:

1. How many metres did James cycle between A and B?

2. How many metres did James cycle between F and H?

3. How many minutes did it take James to cycle from C to E?

4. How many minutes did it take James to cycle from G to I?

5. Approximately how many **miles** did James cycle from B to D?

6. Approximately how many **miles** did James cycle from H to I?

7. Between which two points did James stop cycling and have a rest?

Use this formula to answer the next three questions:

distance (m) ÷ time (min) = speed (m/min)

8. Calculate James' speed between B and C.

9. Calculate James' speed between C and D.

10. Was James travelling faster between C and D or between F and G? Prove how you know.

Answers

| Question | Answer |
|----------|---|
| 1. | How many metres did James cycle between A and B? |
| | 1200 metres |
| 2. | How many metres did James cycle between F and H? |
| | 1600 metres |
| 3. | How many minutes did it take James to cycle from C to E? |
| | 8 minutes |
| 4. | How many minutes did it take James to cycle from G to I? |
| | 9 minutes |
| 5. | Approximately how many miles did James cycle from B to D? |
| | 0.7 miles |
| 6. | Approximately how many miles did James cycle from H to I? |
| | 0.5 miles |
| 7. | Between which two points did James stop cycling and have a rest? |
| | Between E and F |
| 8. | Calculate James' speed between B and C. |
| | $400m \div 4 \text{ mins} = 100m/min$ |
| 9. | Calculate James' speed between C and D. |
| | $800m \div 5 \text{ mins} = 160m/min$ |
| 10. | Was James travelling faster between C and D or between F and G? Prove how you know. |
| | $C \text{ and } D: 800m \div 5 \text{ mins} = 160m/min$ $F \text{ and } G: 1200m \div 6 \text{ mins} = 200m/min$ He was travelling faster between F and G. |