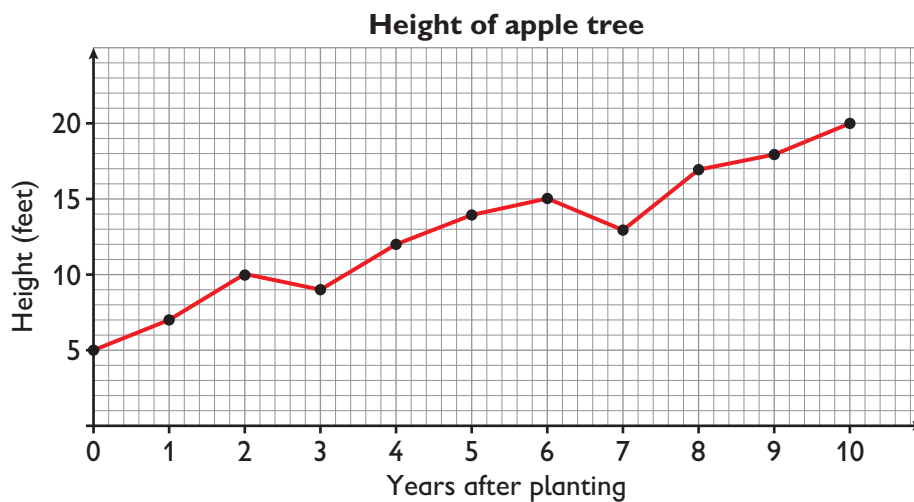


Skills practice A

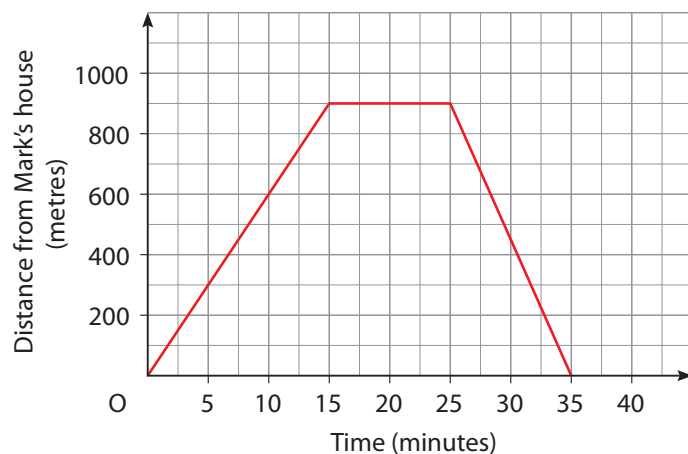
1 Jamila plants an apple tree. The graph shows its growth.



- a How high is the tree when Jamila plants it?
- b How high is it after 5 years?
- c When is it 17 feet high?
- d In which years does Jamila prune it?
- e In which year does it grow the most?

- 2** Mark walks to his local shop to buy some fruit and then returns home.

Here is a distance–time graph for his journey.



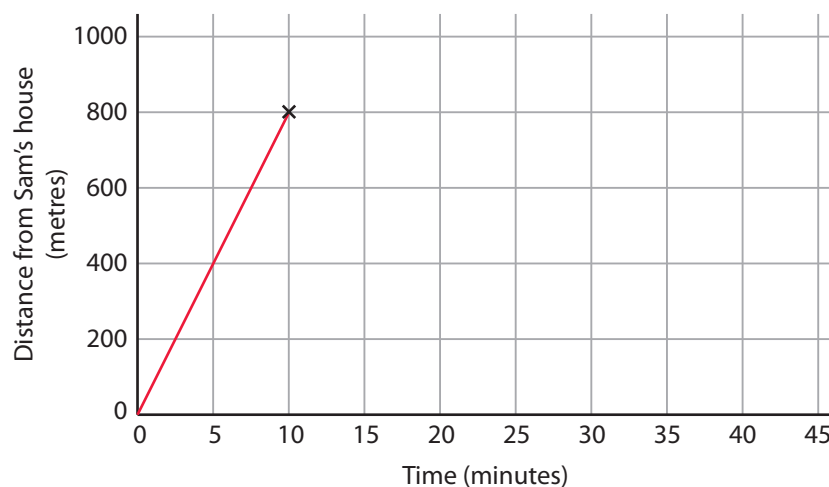
- What does the shape of the graph tell you about Mark's journey?
- How far is the shop from Mark's home?
- How long does Mark spend in the shop?
- How long does it take Mark to walk home?

- 3** Sam goes to the post office.

- The post office is 800m from his home.
- It takes Sam 10 minutes to get there.
- Sam spends 5 minutes in the post office.
- He sets off to return home.
- He covers the first 400m in 10 minutes.
- He then has a rest for 5 minutes.
- The final 400m home takes him 15 minutes.

The first stage of Sam's journey is shown below.

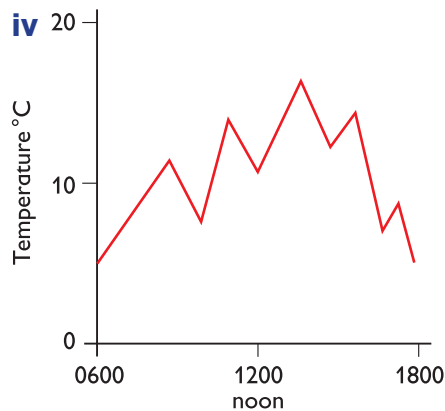
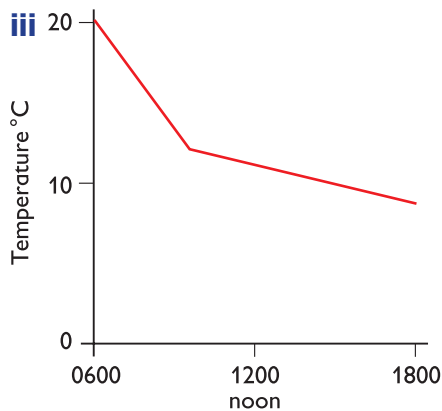
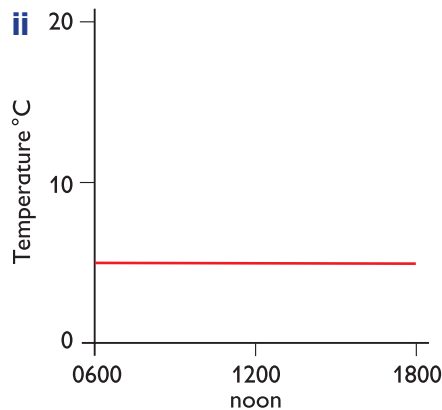
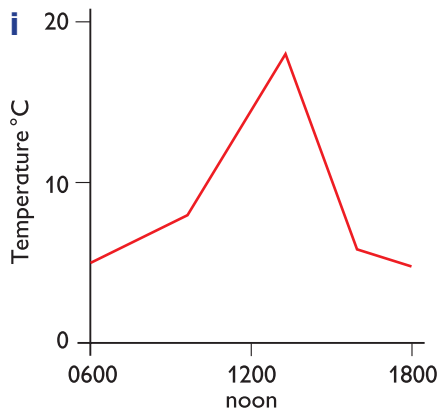
Copy the diagram and draw lines to show the rest of his journey.



4 These graphs show the temperature for four different days.

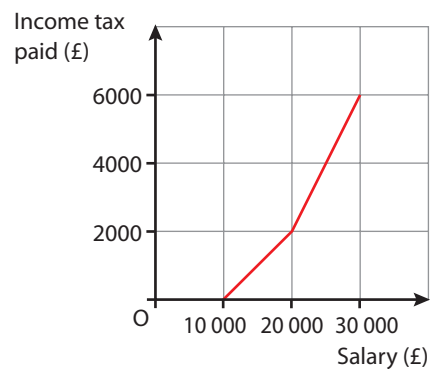
Match the descriptions **a** to **d** to the graphs **i** to **iv**.

- a** The temperature stays cool all day.
- b** The temperature starts cool, warms up and then cools down.
- c** The temperature starts warm and then cools down.
- d** The temperature goes up and down a lot.



5 The graph shows the income tax paid on different salaries in a certain country.

- a** Annette's salary is £9000.
How much tax does she pay?
- b** Sam's salary is £22000.
Estimate how much tax he pays.



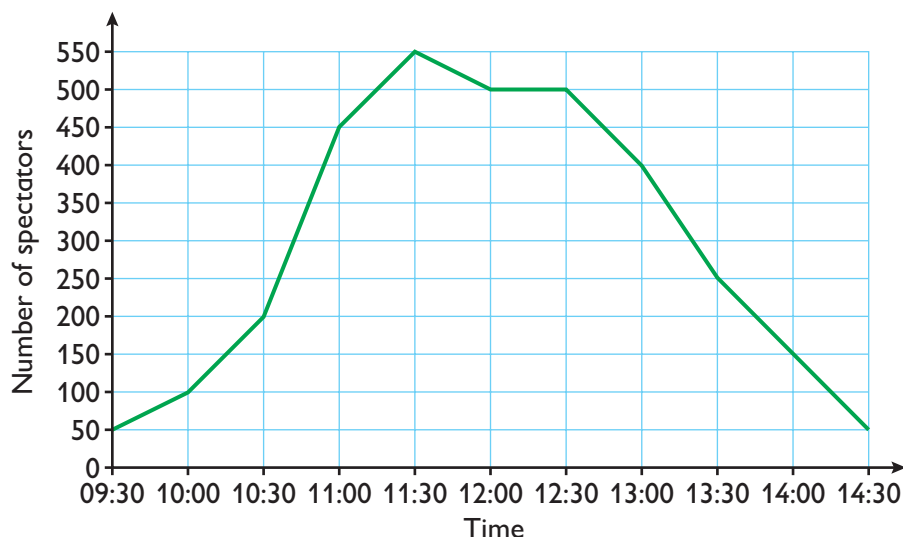
- 6 The table shows the hourly temperature at Palma on a particular day.

Time	9 a.m.	10 a.m.	11 a.m.	12 noon	1 p.m.	2 p.m.	3 p.m.	4 p.m.
Temperature (°C)	10	15	29	30	35	33	30	28

- Show this information as a smooth curve on a graph.
- Between which times does the temperature rise most quickly?
- Between which times does the temperature fall most rapidly?
- Estimate for how long the temperature exceeds 29°C.

- 7 Thena took part in her local half-marathon.

The graph shows the number of spectators at the finishing point during the day.



- What is the largest number of spectators?
- When is the crowd the largest?
- How many spectators are there at 2 p.m.?
- How big is the crowd when Thena finishes at 12.45 p.m.?

- 8 Richard collects rain water in a tank.

He records the level in the tank on the first day of each month.

Date	1 Jan	1 Feb	1 March	1 April	1 May	1 June	1 July	1 Aug	1 Sept	1 Oct	1 Nov	1 Dec
Level of water in tank (mm)	800	760	770	910	715	715	795	580	440	1030	940	885

- Plot the data points on a graph and join them with straight lines.
- When is there least water in the tank?
- In which month is there no change?
- In which month is the greatest change?
 - Was this the wettest month?