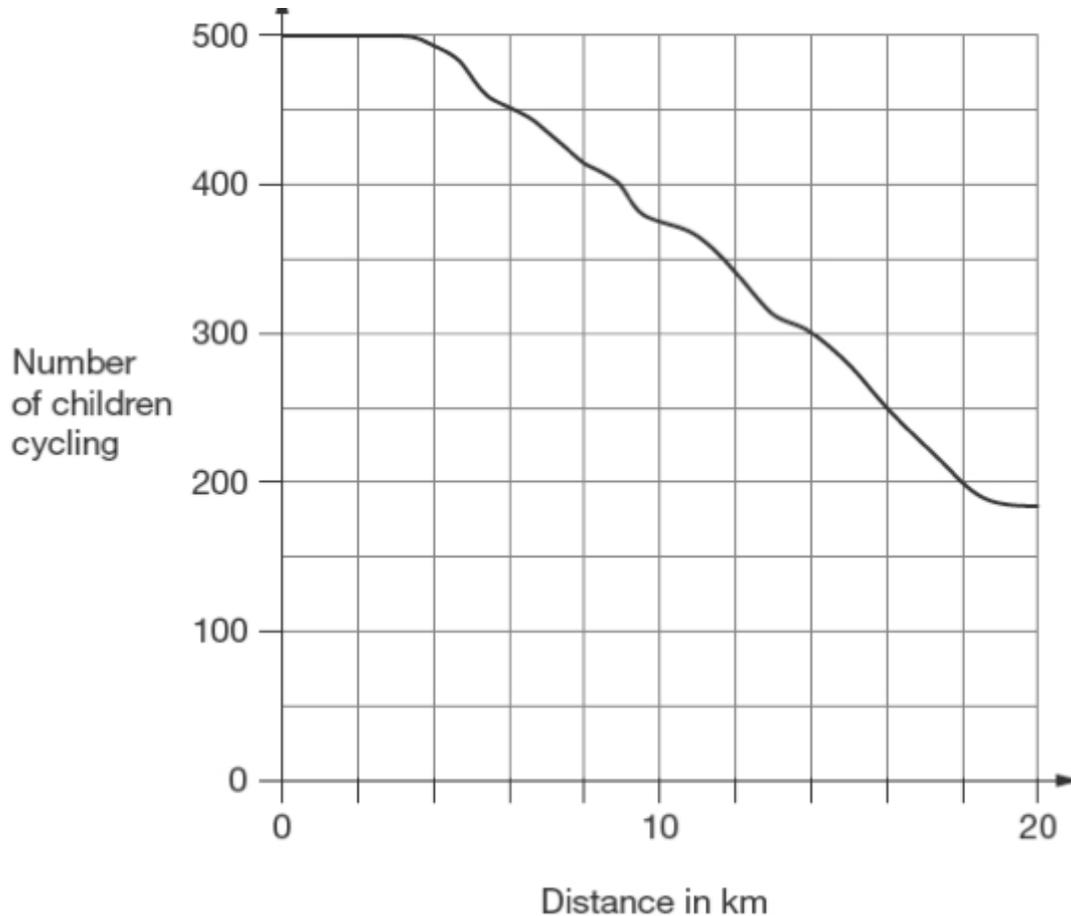


RECALL



500 children started a 20 kilometre sponsored cycle ride.

This graph shows how far they cycled.

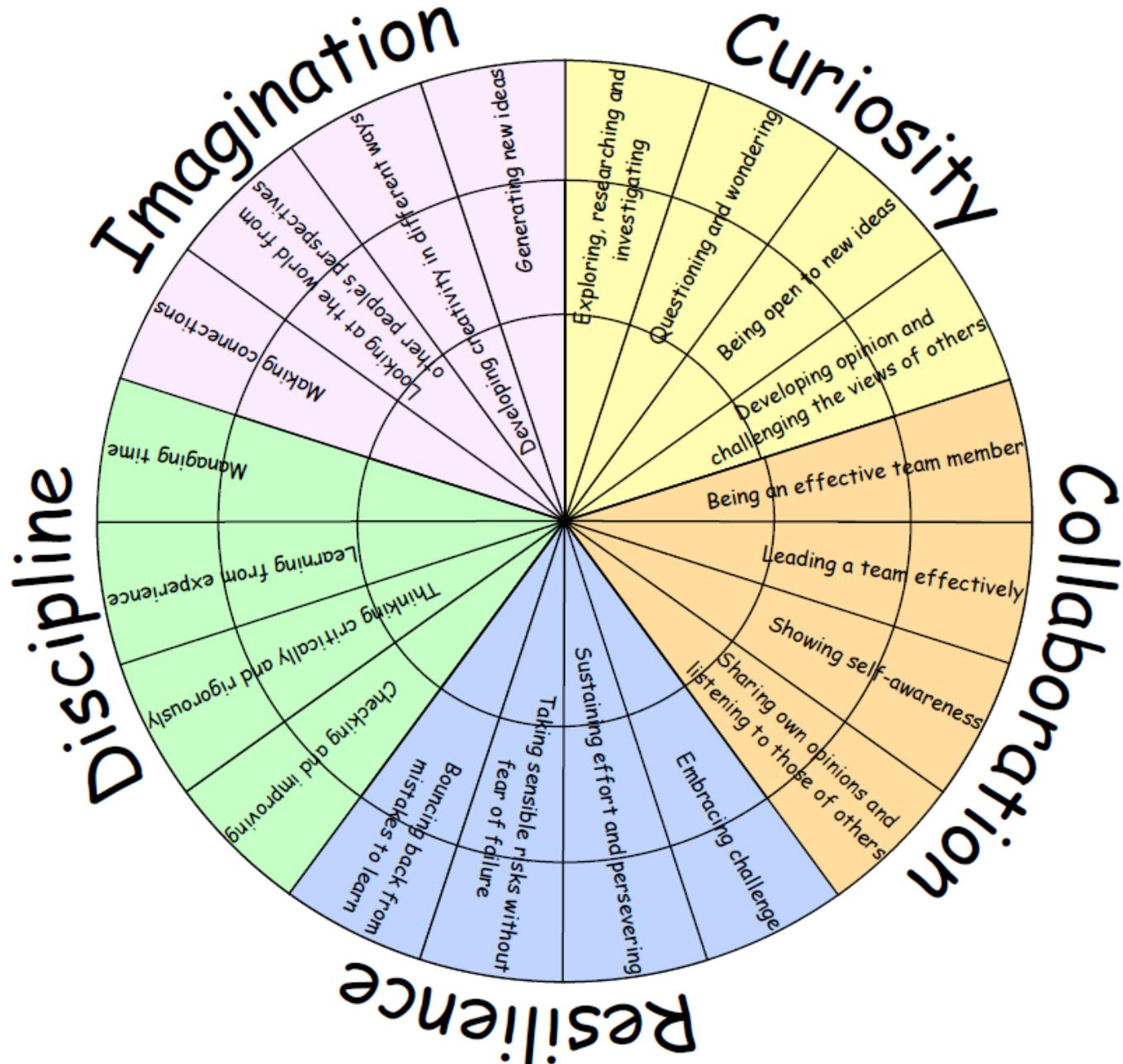
- 1) At what distance were exactly half of the children still cycling?
- 2) Estimate how many children completed the 20 kilometre cycle ride/



Create your own question about this graph

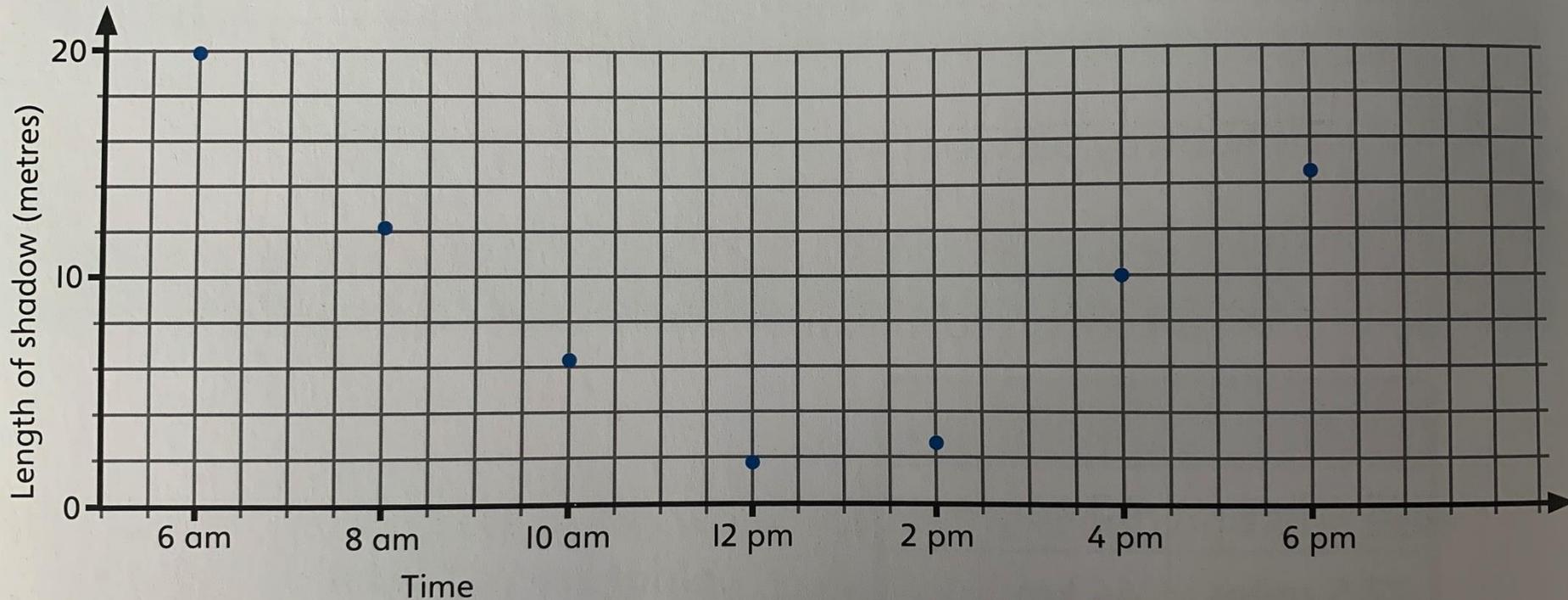
I CAN SOLVE PROBLEMS USING
THE DATA FROM LINE GRAPHS
AND PIE CHARTS
statistics (32ii)

LEARNING HABITS?



GUIDED PRACTICE

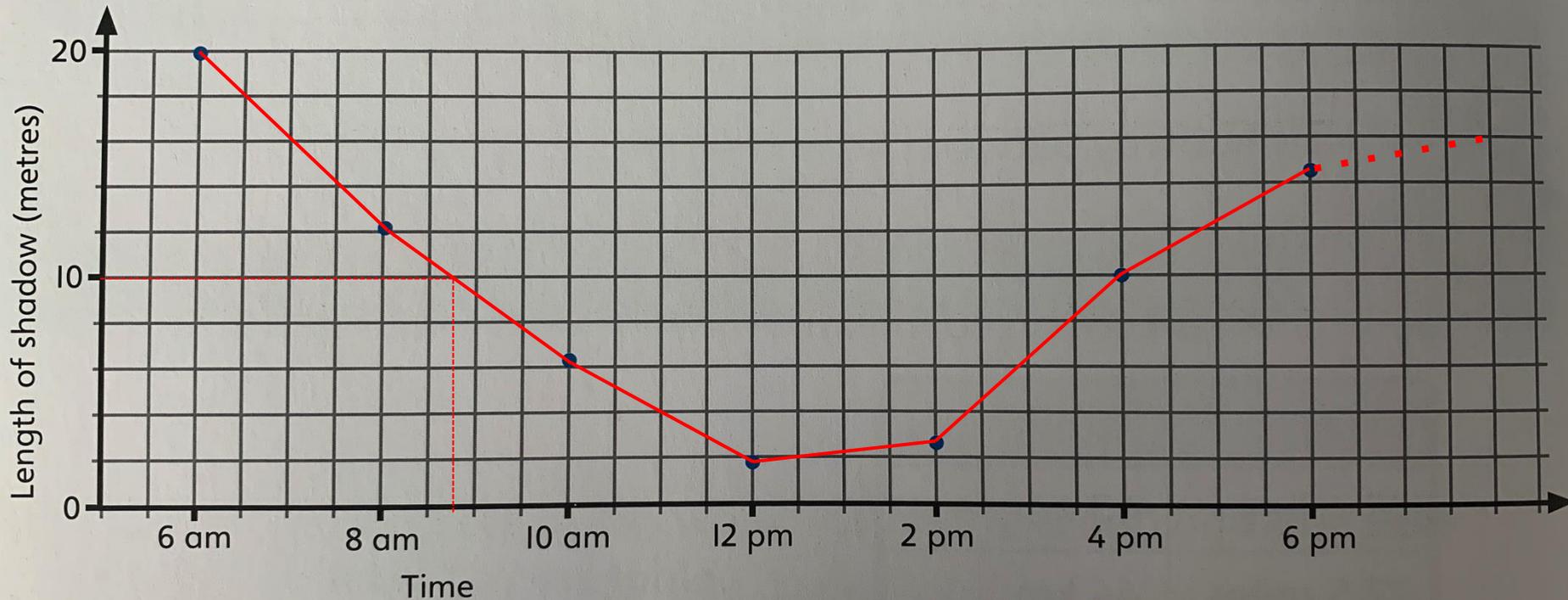
The graph shows the length of a shadow of a tree at different times of the day.



- 1) When was the shadow 10m long?
- 2) Use this graph to predict the height of the shadow at 8pm.

GUIDED PRACTICE ANSWERS

The graph shows the length of a shadow of a tree at different times of the day.



1) When was the shadow 10m long? **8:45am**

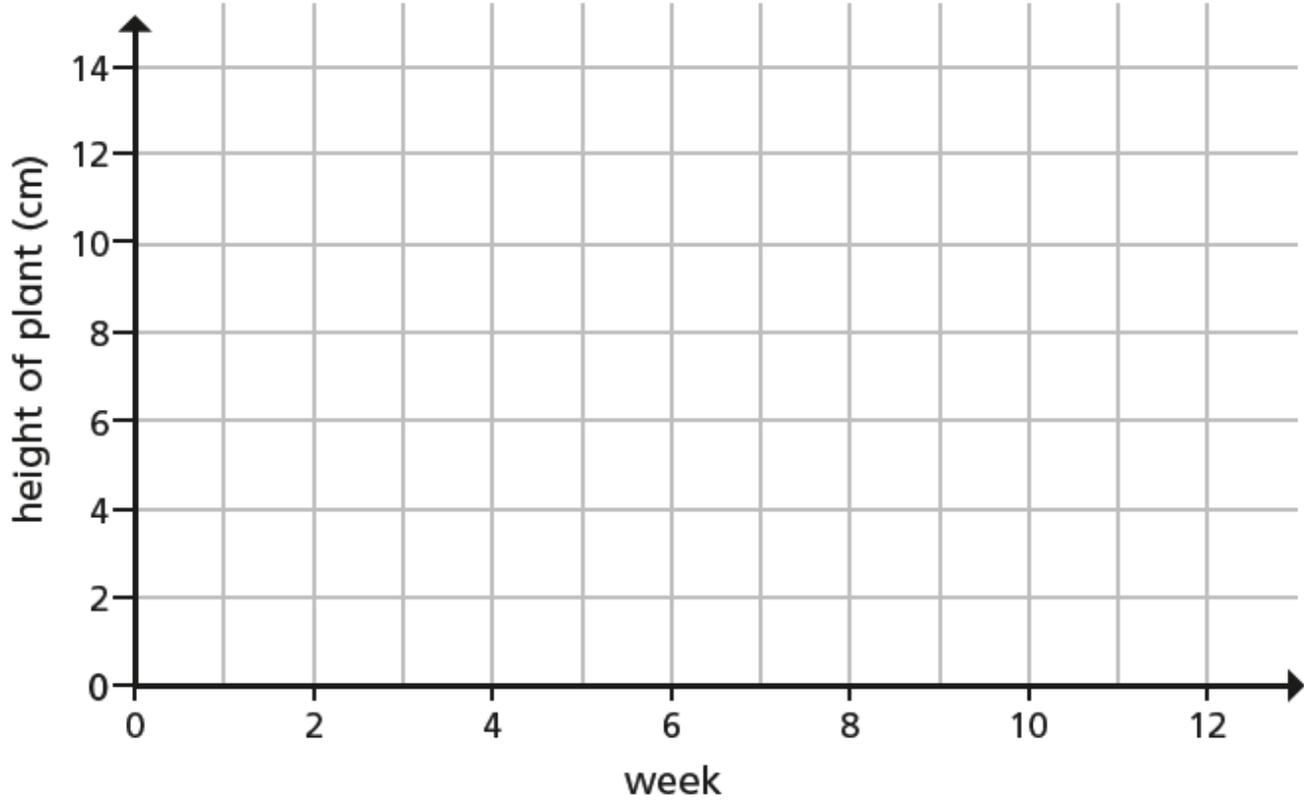
2) Use this graph to predict the height of the shadow at 8pm. **16m**

DIVE DEEPER 1

1) The table shows the height of a plant recorded over a number of weeks.

Week	2	4	6	8	10	12
Height of plant (cm)	2	3	4	7	12	14

a) Complete the line graph to show the height of the plant over time.



b) Whitney says, "In week 7, the plant was approximately 5cm tall."

Do you agree with Whitney?

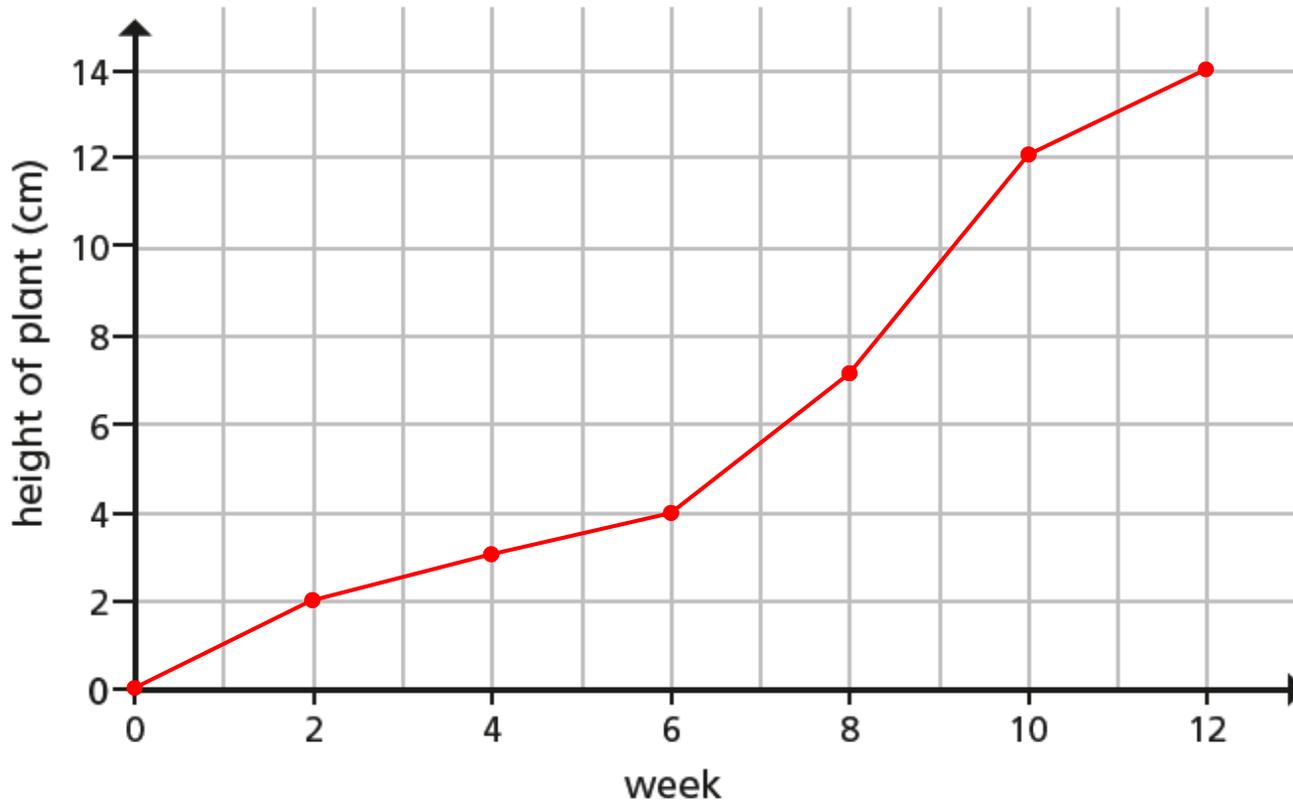
Explain your answer

DIVE DEEPER 1 ANSWERS

1) The table shows the height of a plant recorded over a number of weeks.

Week	2	4	6	8	10	12
Height of plant (cm)	2	3	4	7	12	14

a) Complete the line graph to show the height of the plant over time.

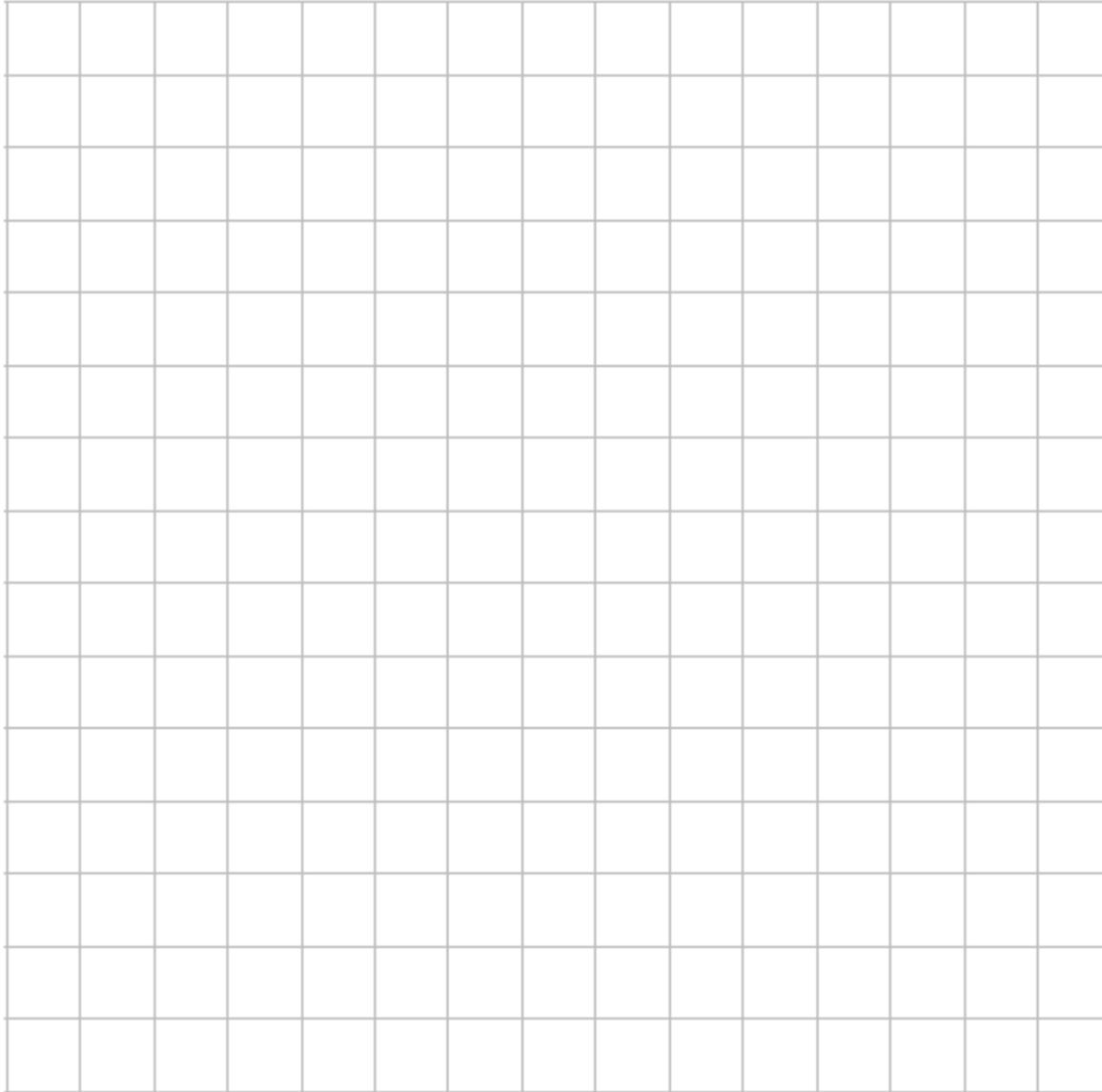


b) Whitney says, "In week 7, the plant was approximately 5cm tall."

Do you agree with Whitney? **Yes,** because the line goes roughly through the 5 cm mark and the line is an estimate as there is no data for week 7.

DIVE DEEPER 2

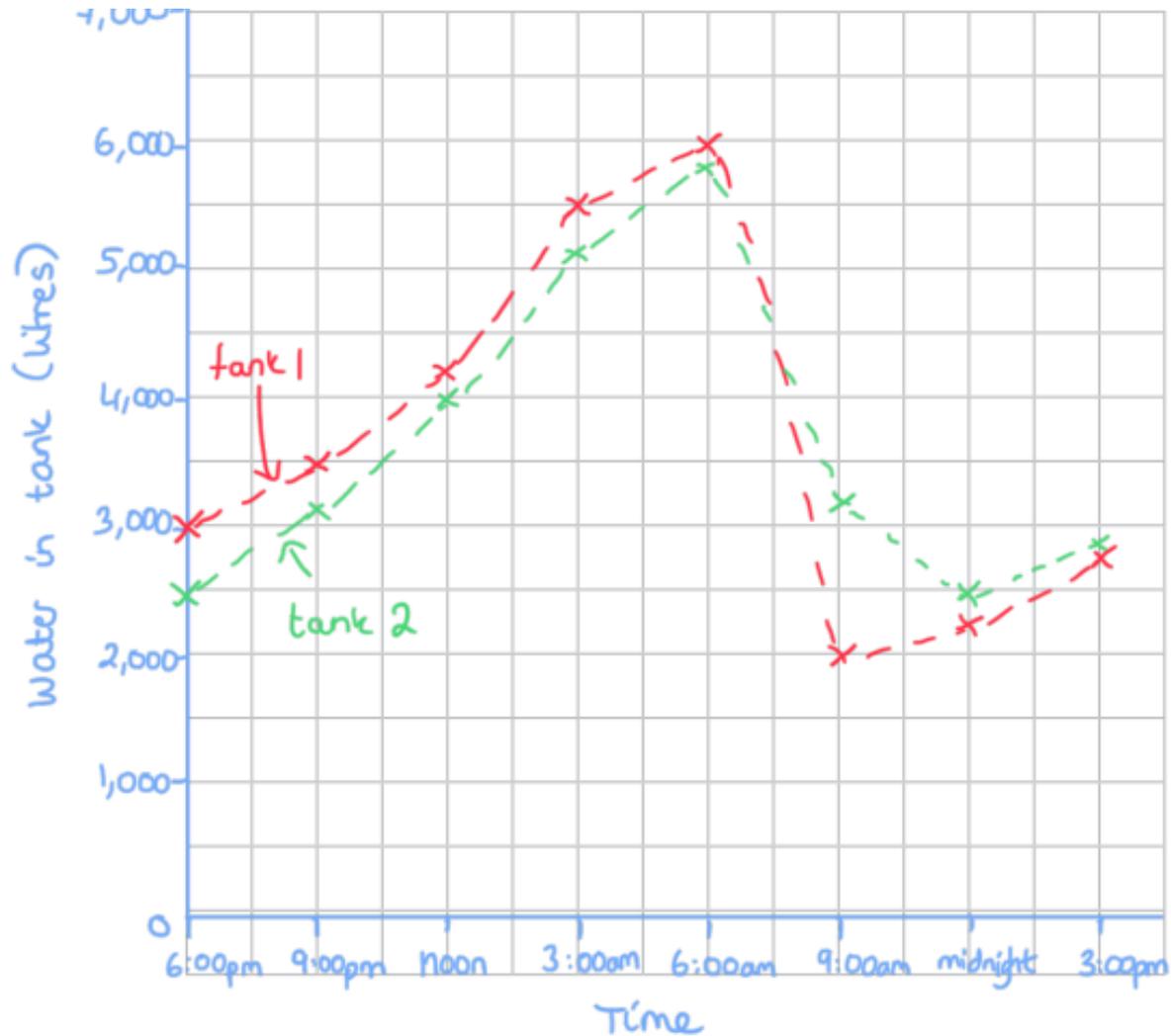
2) The table shows the amount of water in 2 tanks during a day. Draw a line graph to represent the information.



Time	Water in tank 1 (litres)	Water in tank 2 (litres)
6:00pm	3,000	2,500
9:00pm	3,500	3,100
noon	4,250	4,000
3:00am	5,500	5,100
6:00am	6,000	5,800
9:00am	2,000	3,100
midnight	2,250	2,500
3:00pm	2,750	2,900

DIVE DEEPER 2 ANSWERS

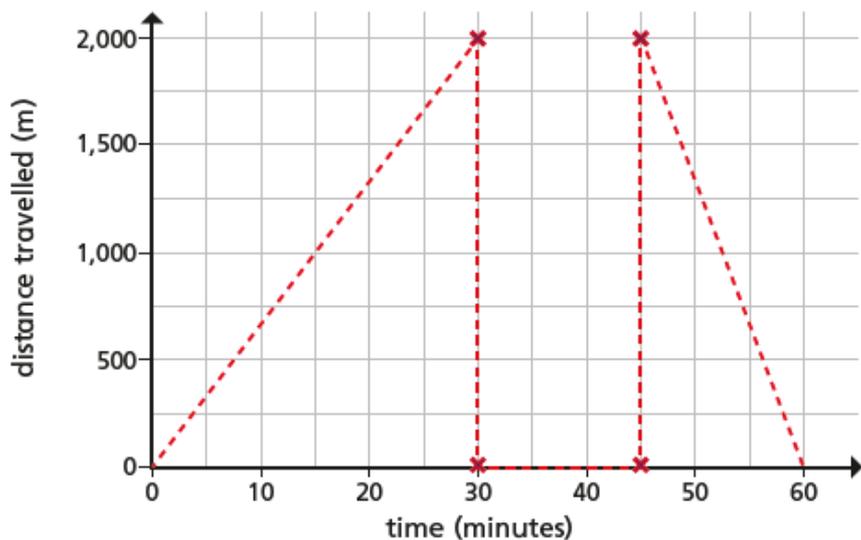
2) The table shows the amount of water in 2 tanks during a day. Draw a line graph to represent the information.



Time	Water in tank 1 (litres)	Water in tank 2 (litres)
6:00pm	3,000	2,500
9:00pm	3,500	3,100
noon	4,250	4,000
3:00am	5,500	5,100
6:00am	6,000	5,800
9:00am	2,000	3,100
midnight	2,250	2,500
3:00pm	2,750	2,900

DIVE DEEPER 3

3) Amir goes for a walk.
He walks for half an hour before stopping to rest for 15 minutes.
Then he jogs 2km back to his house.
He draws a line graph showing his journey.



a) Explain one mistake that Amir has made.

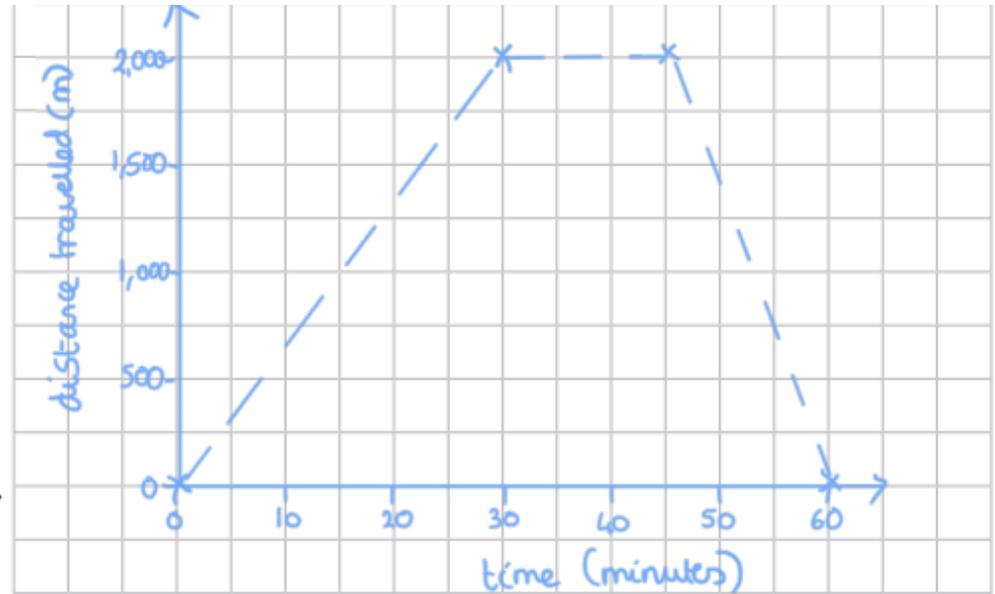
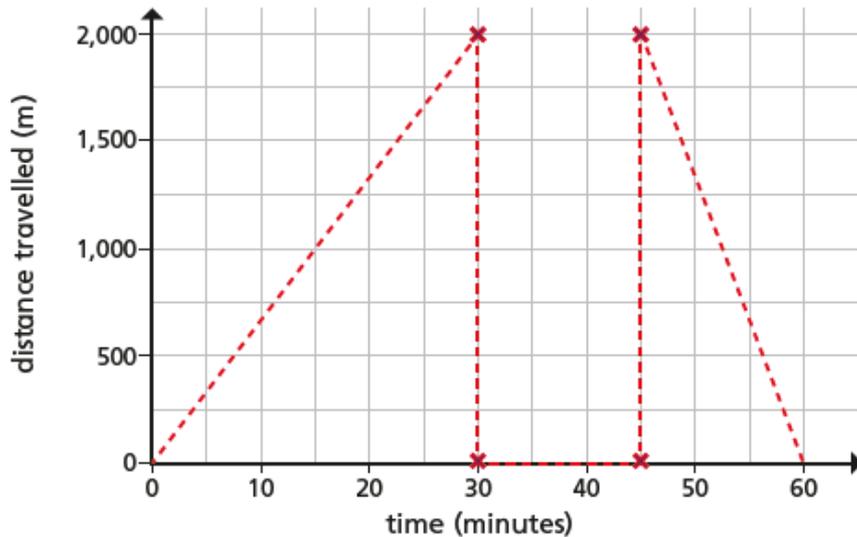
b) Draw the correct line graph to represent Amir's journey.

c) How are the two graphs the same?

d) How are the two graphs different?

DIVE DEEPER 3 ANSWERS

3) Amir goes for a walk.
He walks for half an hour before stopping to rest for 15 minutes.
Then he jogs 2km back to his house.
He draws a line graph showing his journey.



a) Explain one mistake that Amir has made. **When he rests he has put the distance travelled to zero rather than keeping it at 2,000m**

b) Draw the correct line graph to represent Amir's journey.

c) How are the two graphs the same?

d) How are the two graphs different?

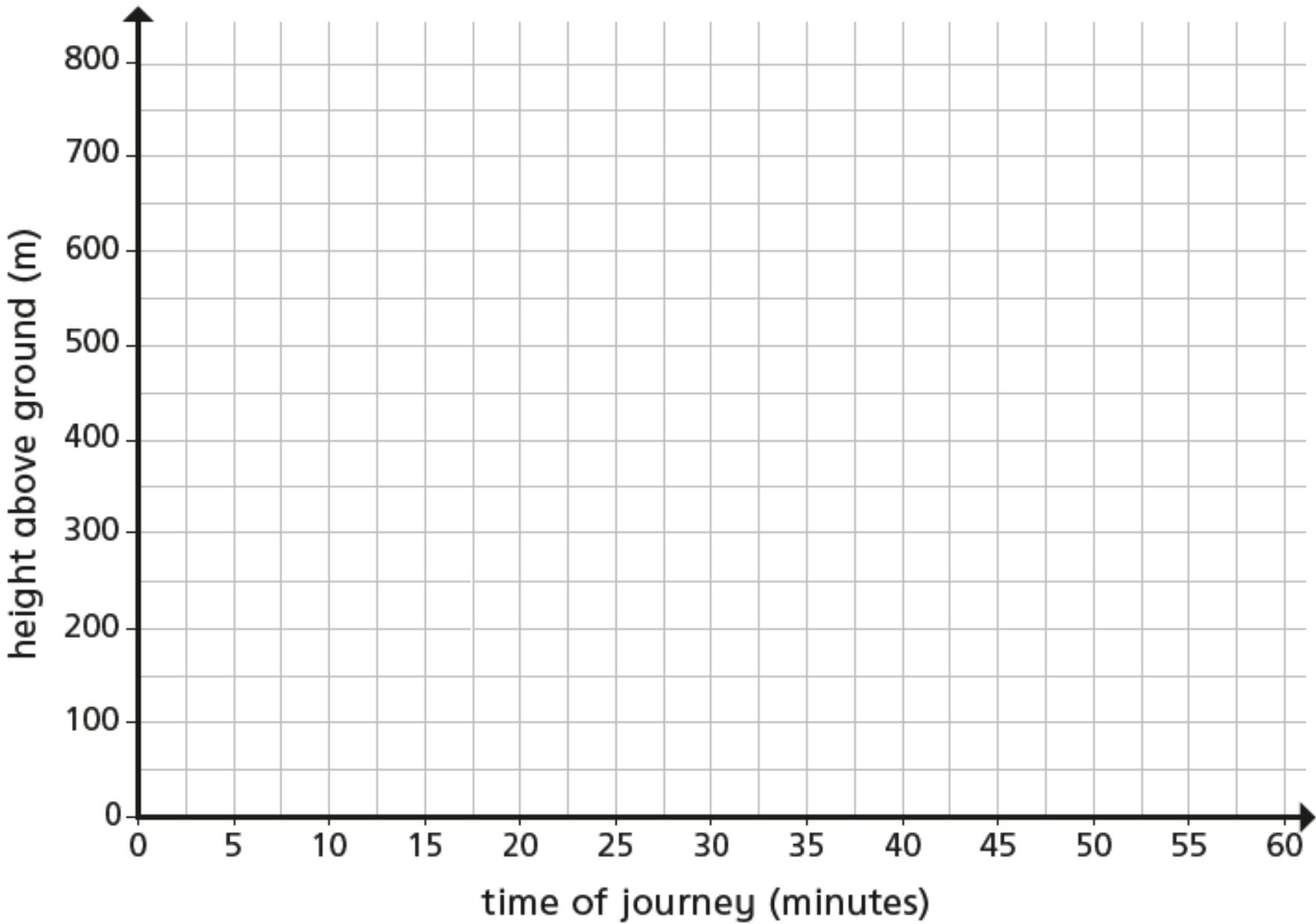
DIVE DEEPER 4A

4) The height of a hot air balloon is recorded over 60 minutes.

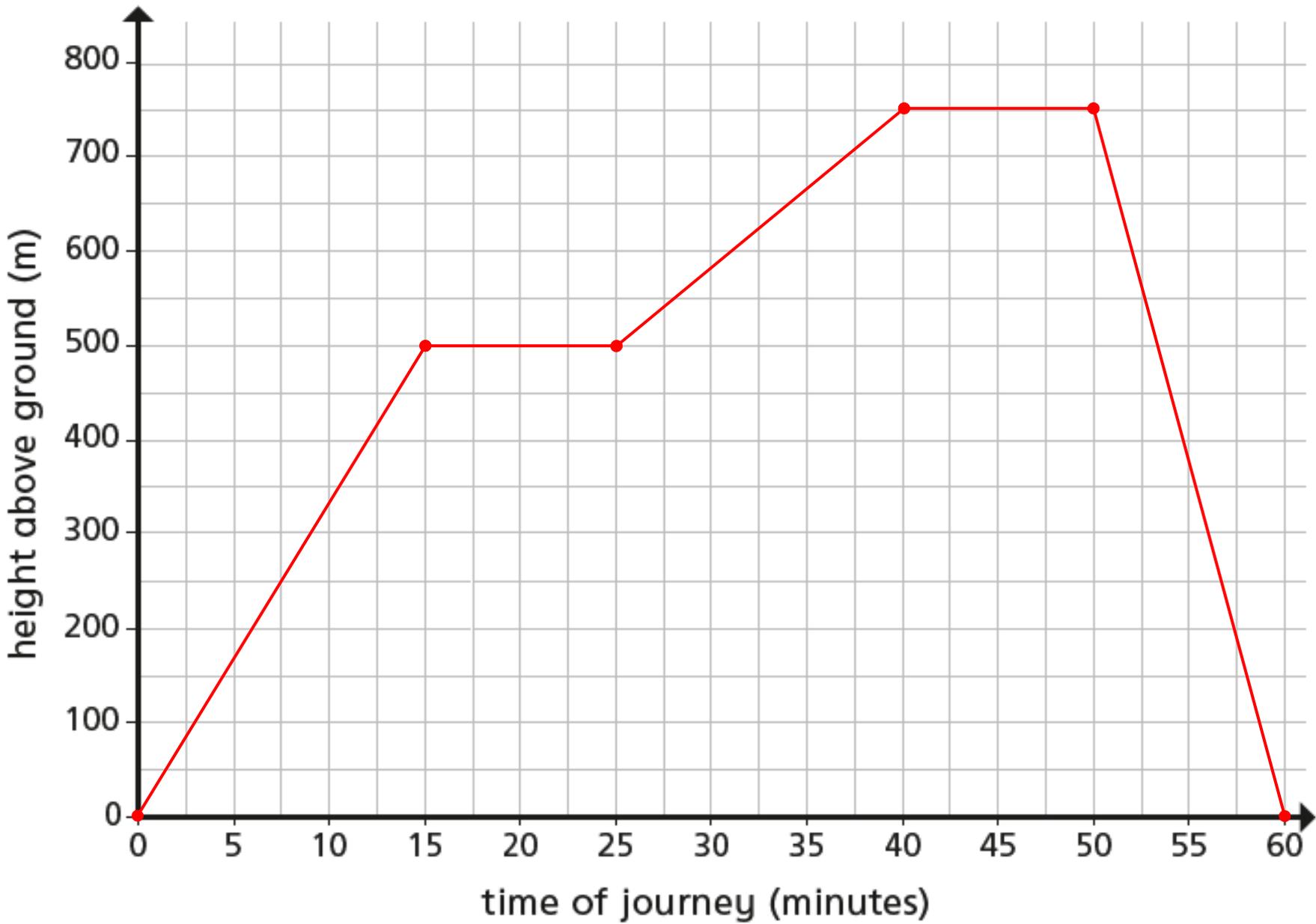
- The hot air balloon starts from the ground at 0 minutes and rises at a steady rate.
- After 15 minutes the hot air balloon is 500m above the ground.
- It stays at this height for 10 minutes.
- The hot air balloon then gradually rises to 750m over the next 15 minutes.
- It stays at this height for 10 minutes.
- For the remainder of the time, the hot air balloon gradually returns to the ground

Using the axis on the next page, draw the graph of the hot air balloon's journey.

DIVE DEEPER 4B



DIVE DEEPER 4B ANSWERS



SELF-ASSESSMENT

- Some will even be able to read a story to help plot a line graph
- Some will be able to create an suitable scale and plot a line graph
- Most will be able to plot data accurately
- All will be able to join points to create a line graph