Flashback 4

Warm-Up Challenge

1) Round 7.18 to the nearest whole number

2) Write 0.07 as a fraction

3) Find the sum of $\frac{1}{3}$, $\frac{1}{5}$ and $\frac{1}{6}$

4) What is the mathematical name of the shape?

Warm your brains up thinking about the above questions

White Rose Maths

Teaching Input:

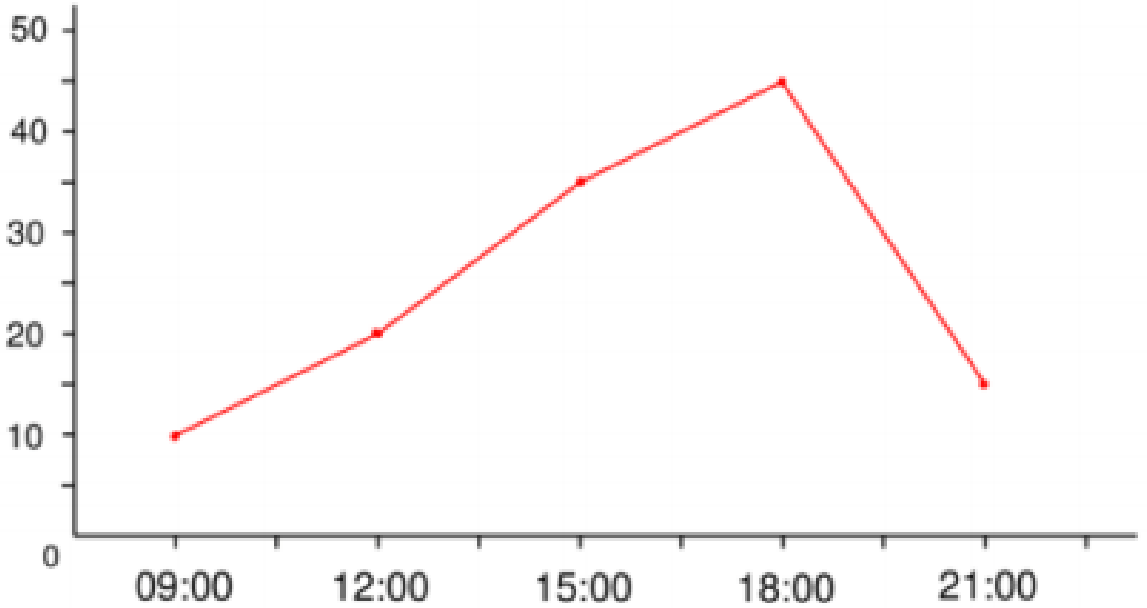
Week 6 – Home Learning

Interpreting line graphs

The horizontal axis on a graph runs from left to right.

The vertical axis on a graph runs from top to bottom.

Label the vertical axis and the horizontal axis on the graph below.



Teaching Input:

Week 6 – Home Learning

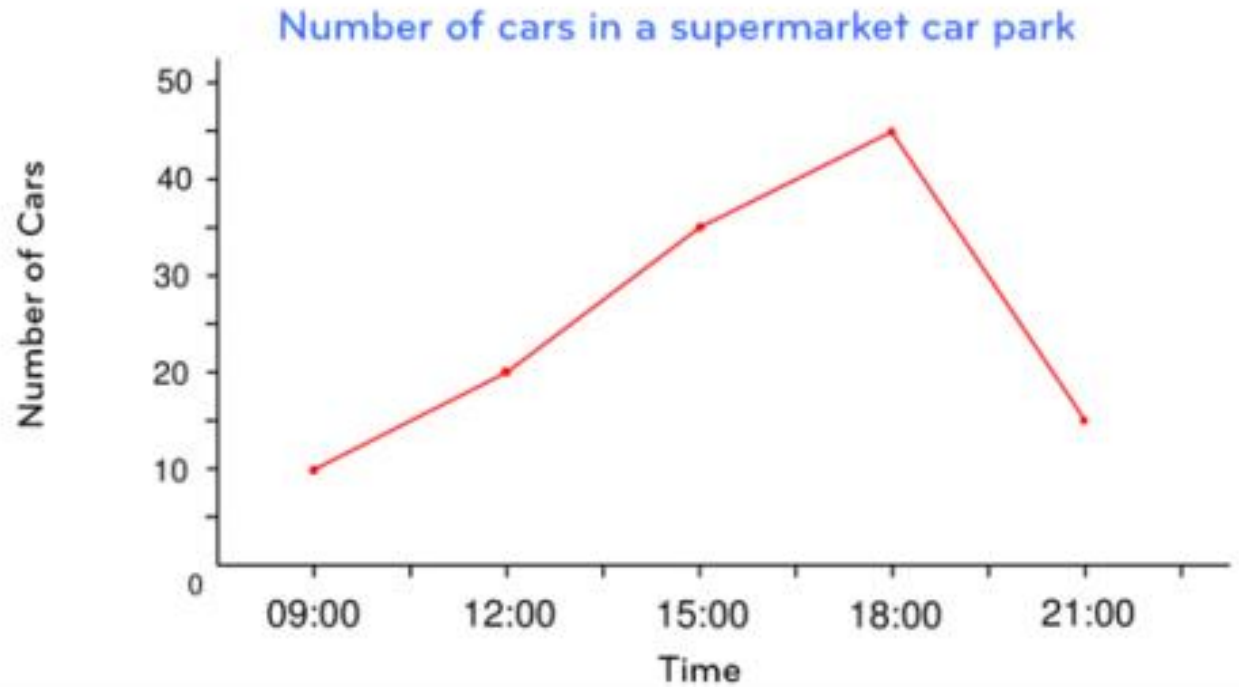
Interpreting line graphs

A line graph joins points to show how data changes.

Complete the sentences for this line graph.

The _____ axis shows the time of day.

The _____ axis shows the number of cars.



Teaching Input:

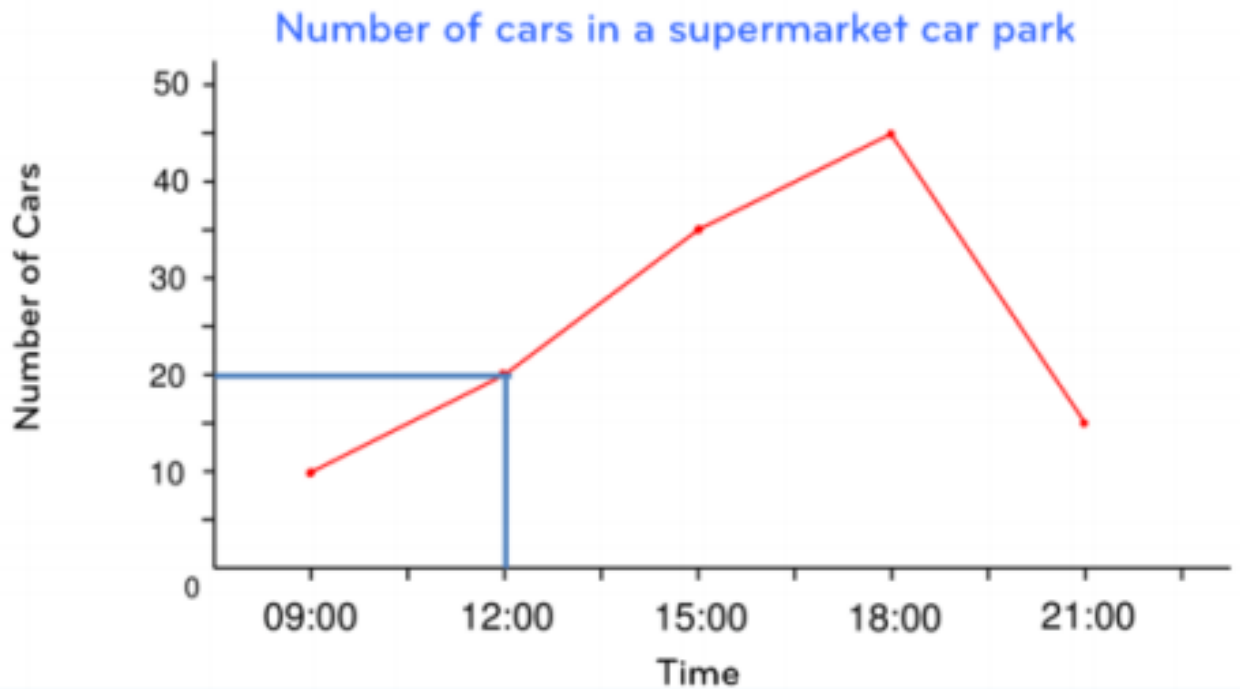
Week 6 – Home Learning

Interpreting line graphs

Read from 12:00 on the horizontal axis to the line. Then across to 20 on the **vertical axis**.

The point on the line shows that 20 cars were parked at 12:00.

How **many** cars were parked at 21:00?



Teaching Input:

Week 6 – Home Learning

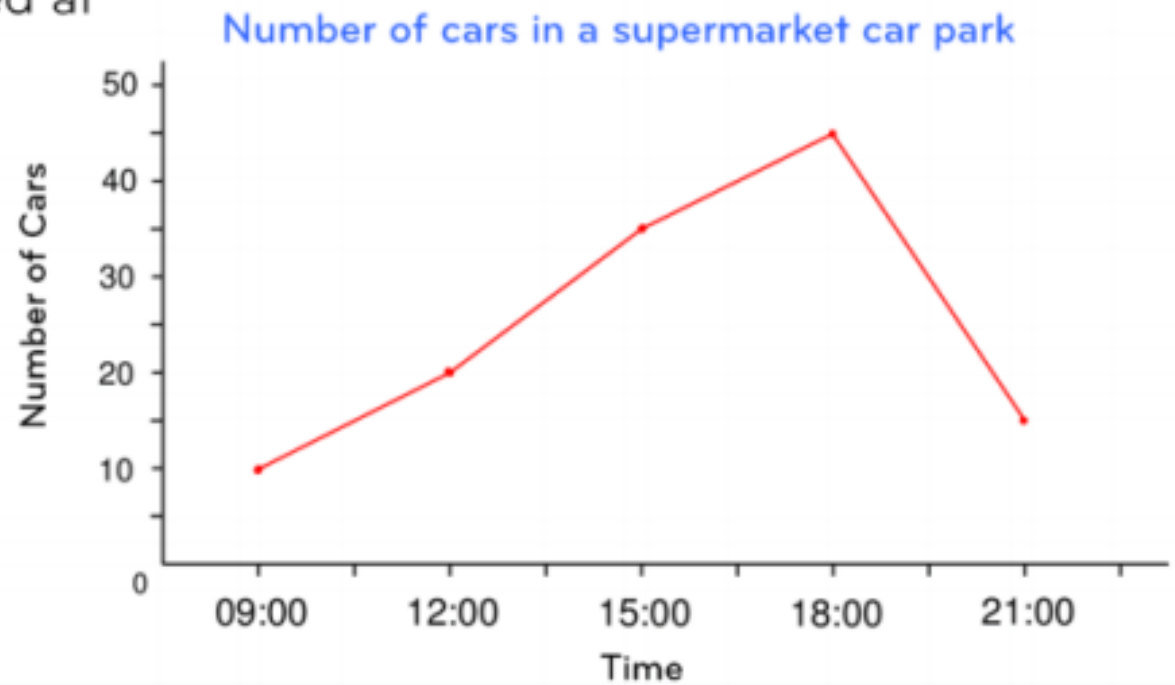
Interpreting line graphs

The **highest** point of the line graph is at 18:00.

The **highest** point shows the **greatest** number of cars.

1. How **many** cars were parked at 18:00?

2. Why might the **greatest** number of cars be parked at 18:00?



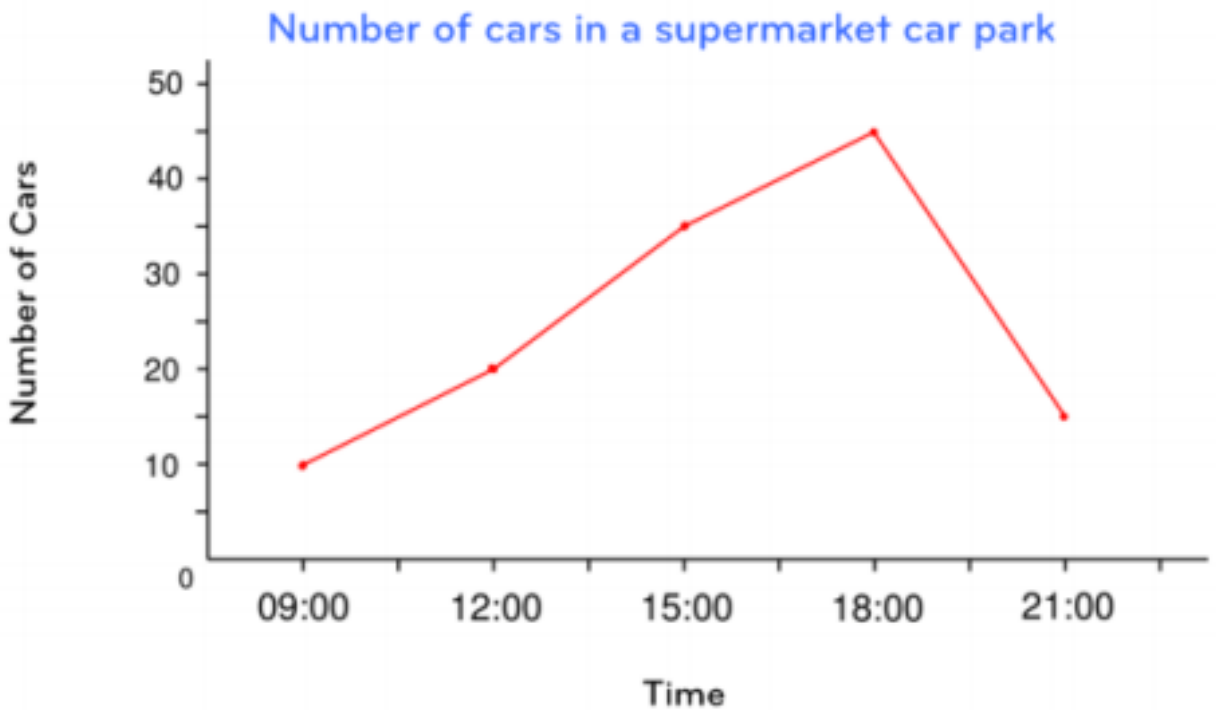
Teaching Input:

Week 6 – Home Learning

Interpreting line graphs

You can use what you know about **adding** and **subtracting** to solve problems using the data on the graph.

1. How many more cars were parked at 15:00 than at 12:00? ☐



Teaching Input:

Week 6 – Home Learning

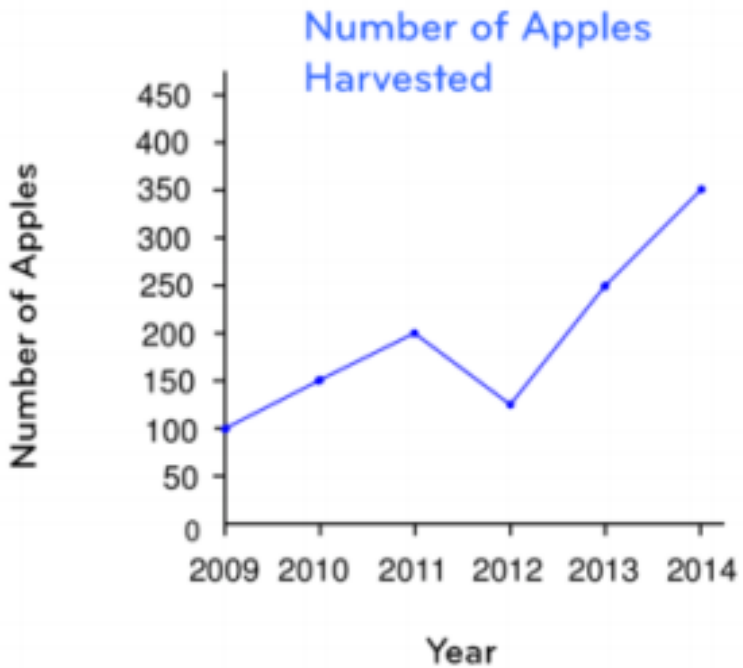
Interpreting line graphs

Here is another example. Read from 2010 on the **horizontal axis** to the line. Then across to 150 on the **vertical axis**.

The point on the line shows that 150 **apples** were picked in 2010.

1. How many **apples** were harvested in 2011?

2. Why might the number of **apples** have **decreased** in 2012?



Teaching Input:

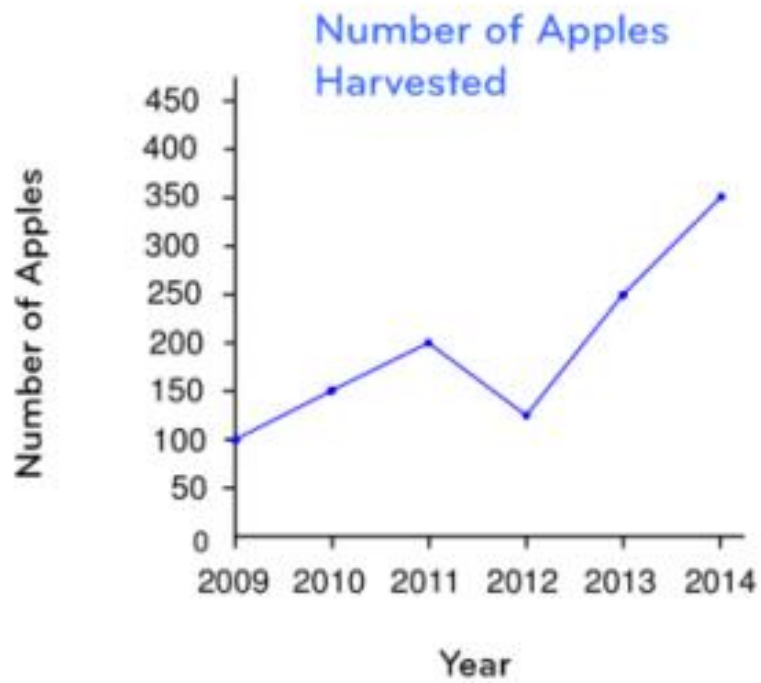
Week 6 – Home Learning

Interpreting line graphs

Solve the problems. Use the graph and what you know about **adding** and **subtracting**.

1. What is the **difference** between the number of **apples** in 2014 and the number of **apples** in 2009?

2. What was the **total** number of **apples** harvested in 2009 **and** 2013?

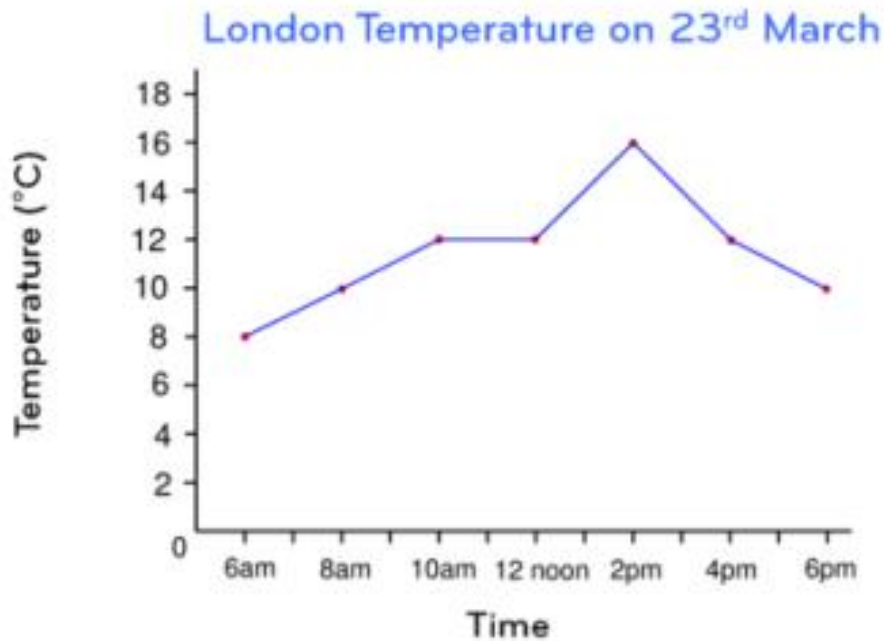


Teaching Input:

Week 6 – Home Learning

Practice time

Use the line graph to solve the problems.



1. What was the **temperature** at 10am?

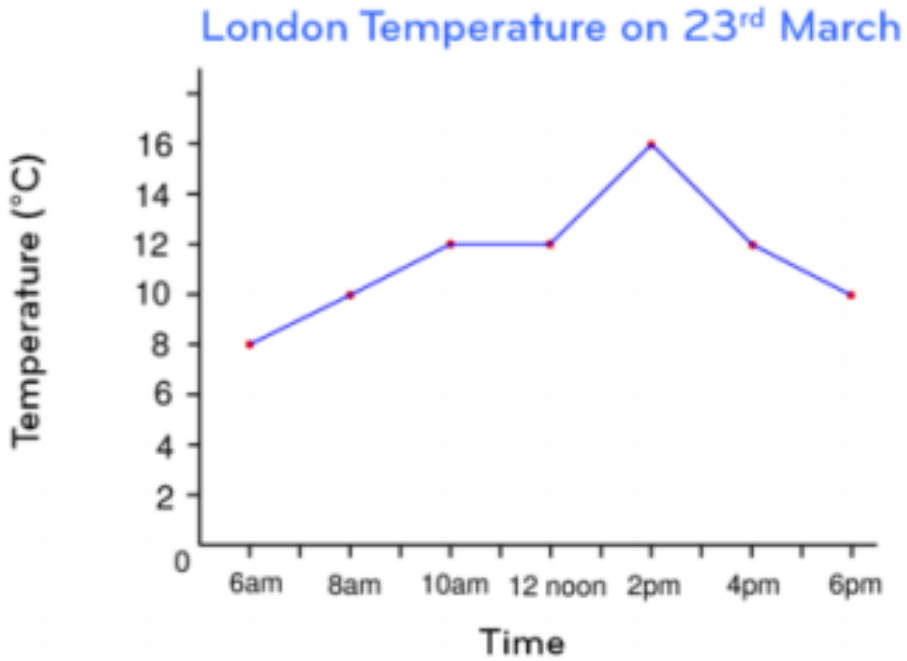
2. Which of these times was the **hottest**: 10am, 2pm, 4pm?

3. Why might there be a **lower temperature** at 6am than at 4pm?

Teaching Input:

Week 6 – Home Learning

Practice time



4. How many **more** degrees was the **temperature** at 12 noon than at 6pm?

5. **Iona** says the **greatest temperature** recorded on 23rd March was **twice** the **lowest temperature** recorded. Is she correct? Explain.

Independent Activity: *Now grab a pen and paper and see how many questions you can answer*

Week 6 – Home Learning

Bees:

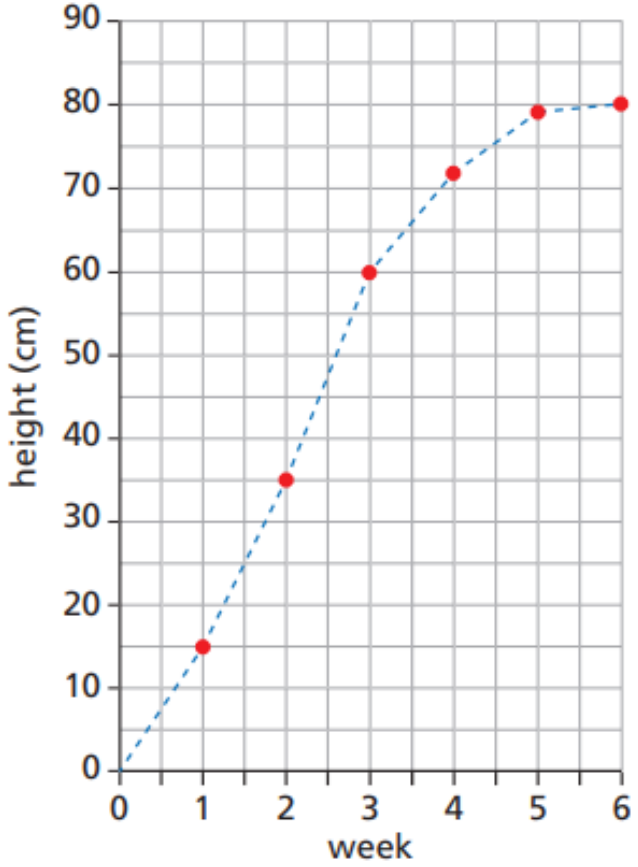
1 The graph shows the height of a sunflower on the first day of each week for 6 weeks.

a) What is the height of the sunflower at the start of week 3?

b) What is the height of the sunflower at the start of week 2?

c) Eva thinks the height of the sunflower at the start of week 4 is 75 cm. Explain why Eva is wrong.

d) By how much does the sunflower grow from the start of week 3 to the start of week 6?



2 The graph shows the population of a town at the end of each decade from 1950 to 2000

a) What was the population at the end of 1980?

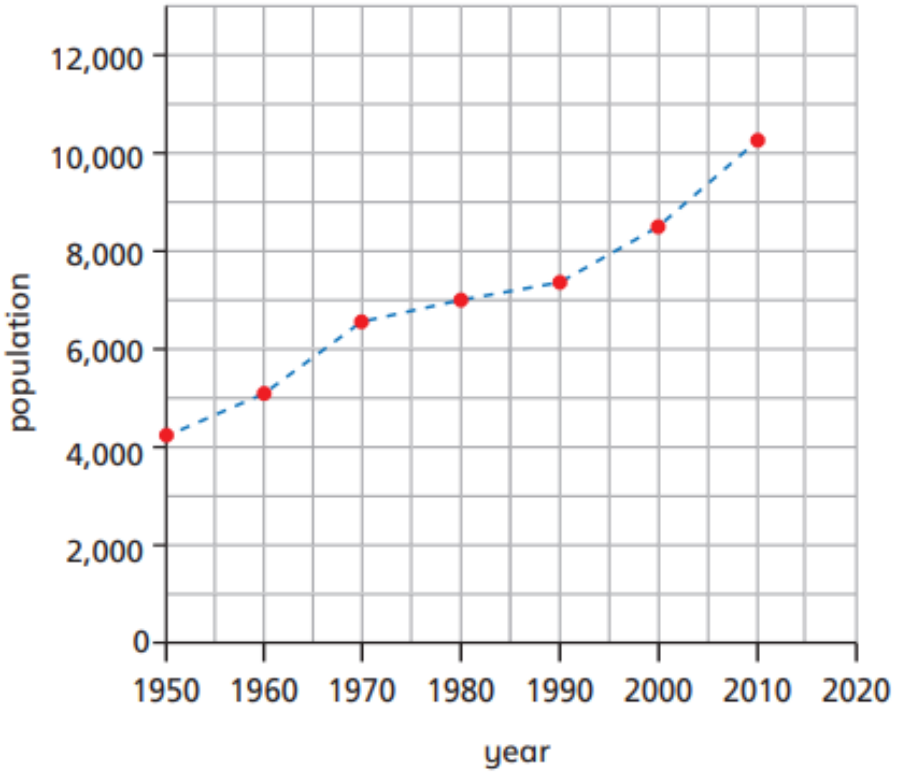
b) What was the population at the end of 2000?

c) Can you accurately tell the population in 1991? Why?

d) Which decade had the least population increase?

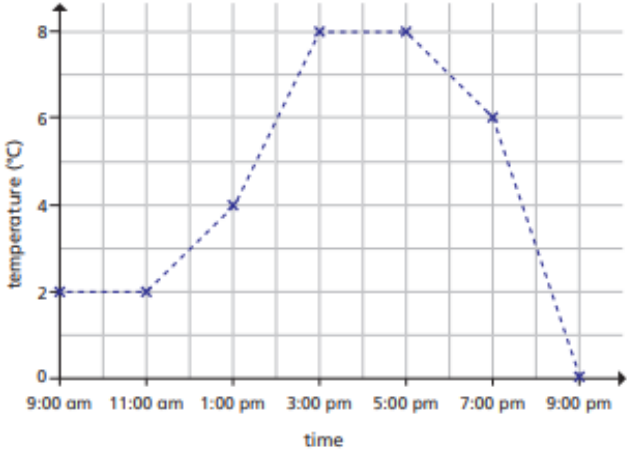
e) Predict the population at the end of 2020

Compare answers with a partner.



Beetles:

1 The graph shows the temperature in Birmingham on one day.



a) What was the temperature at 1:00 pm?

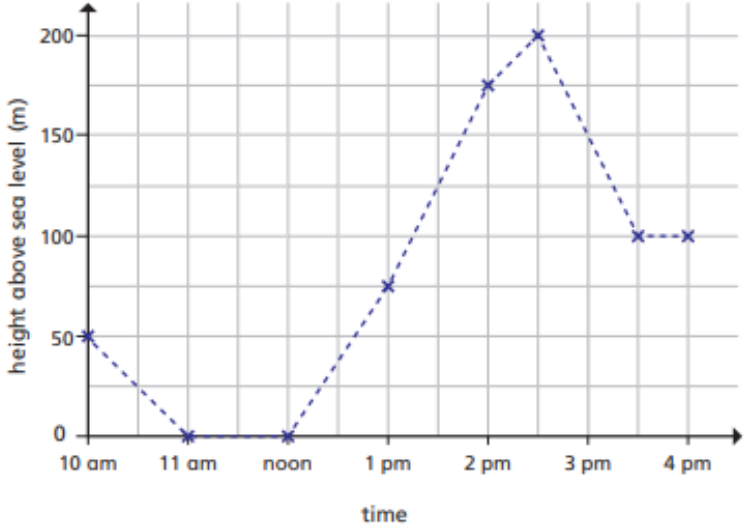
b) What was the difference in temperature between 11:00 am and 1:00 pm?

c) Between which times was the temperature increasing?

d) How often was the temperature recorded?

2 Aisha goes for a walk.

The graph shows the height above sea level during her walk.



a) What was the height above sea level where Aisha was walking at 2 pm?

b) At what time in Aisha's walk was she standing 200 m above sea level?

c) Part of the walk was along a beach.

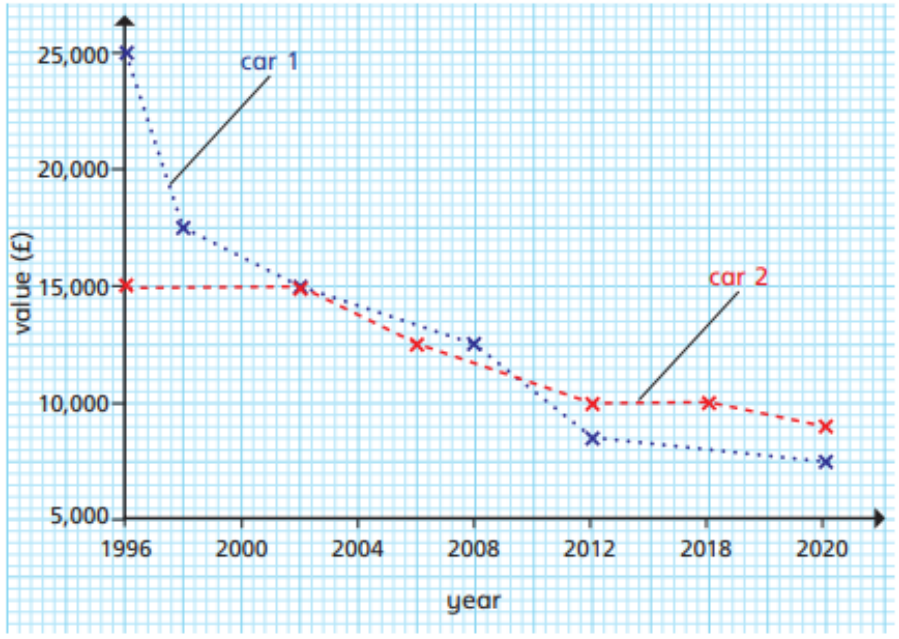
Between which times did Aisha walk along the beach?

How do you know? Talk about it with a partner.

d) Did the walk start and finish in the same place?

Explain how you know.

3 The graph shows the values of two cars over time.



a) In which year was the recorded value of the cars the same?

b) In which two years was the difference in the recorded values of the two cars the same?

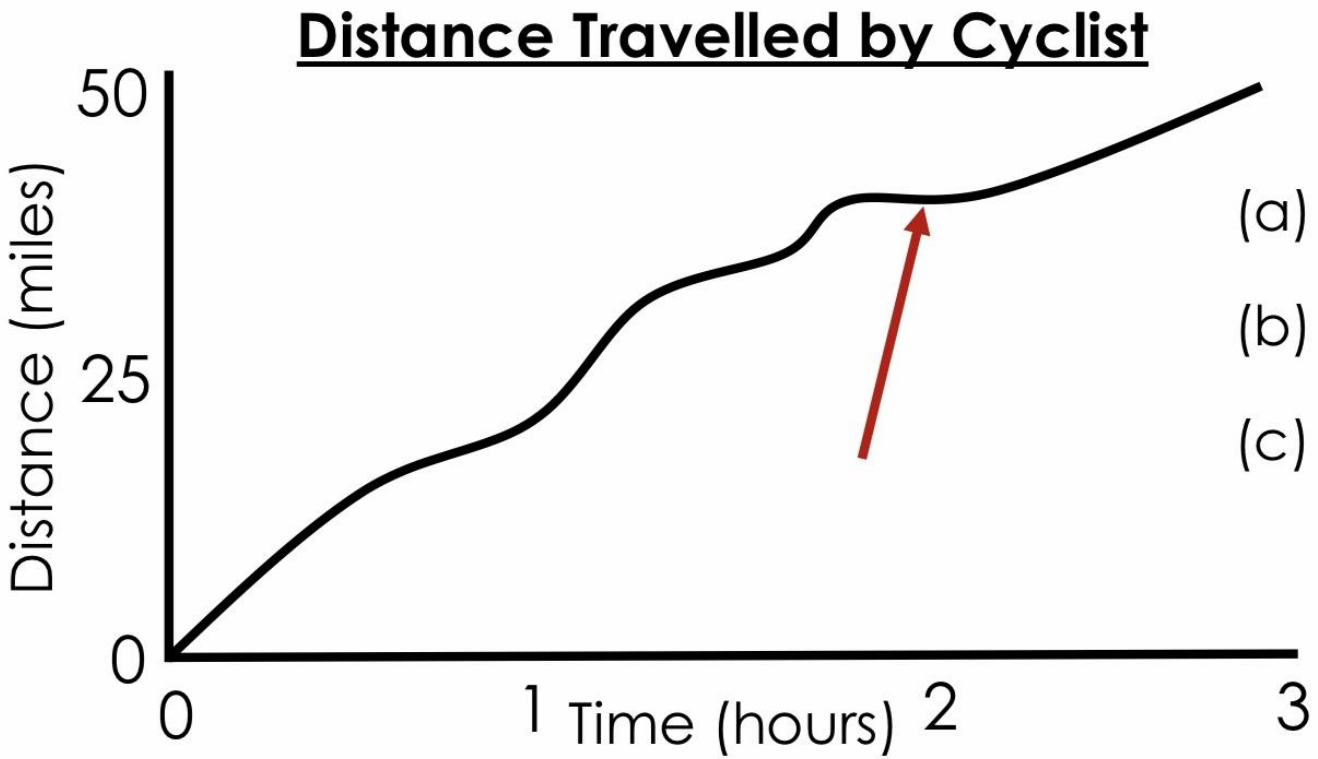
c) Which car's value decreased the most between 1996 and 2020?

d) For approximately how many years was the value of car 2 greater than the value of car 1?

Which answer?

This graph shows the distance travelled by a cyclist.

What is happening at the point showed by the arrow?



(a) The cyclist has stopped

(b) The cyclist is riding slower

(c) The cyclist is riding at the same speed