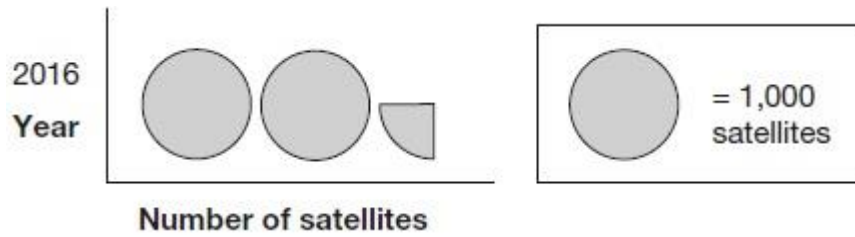


Q1.

This pictogram shows the number of satellites above the Earth in 2016.

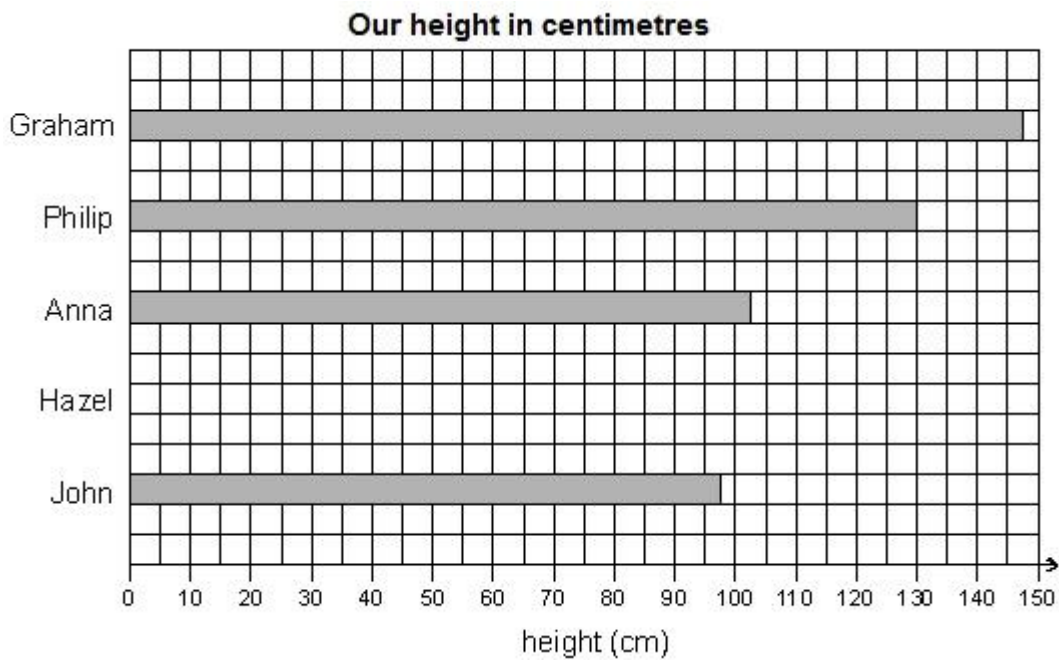


How many satellites were above the Earth in 2016?

1 mark

Q2.

Five children made a graph.



Hazel is 135 cm tall.

Show this on the graph.

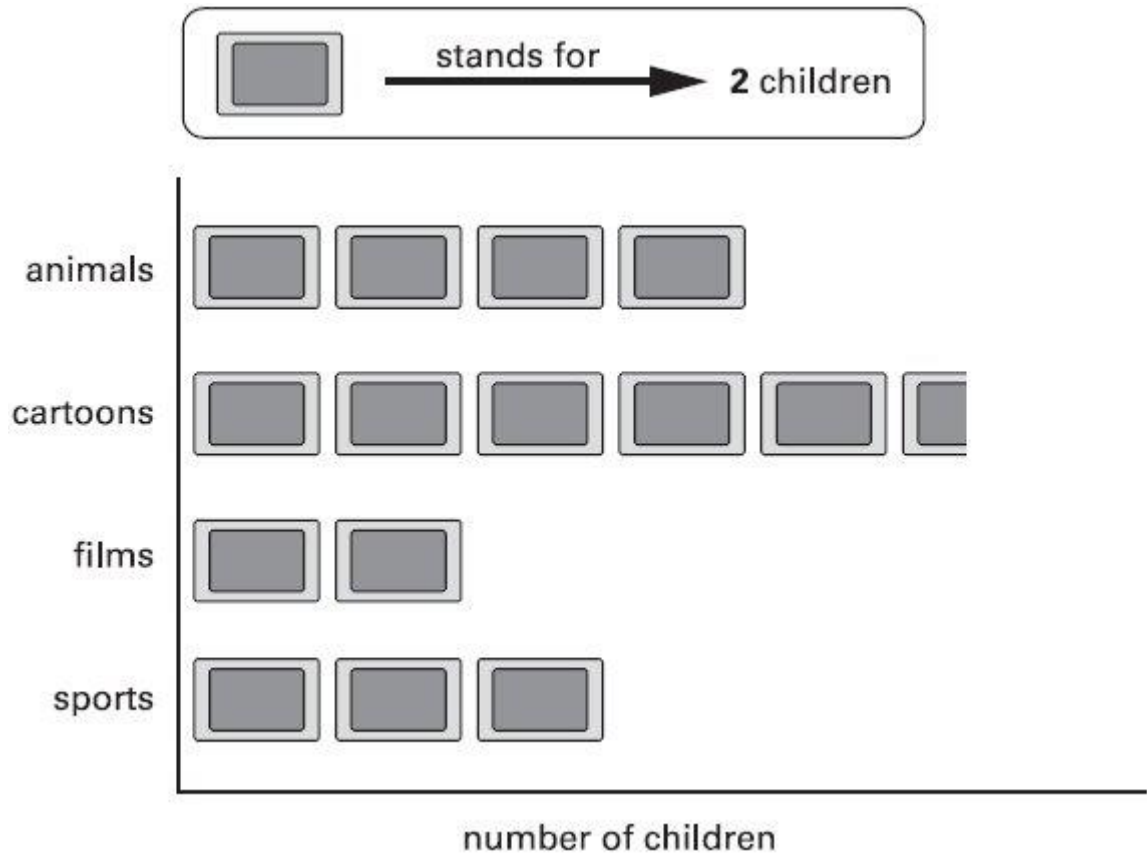
1 mark

Q3.

Kiz asked each child in his class,

'What kind of television programme do you prefer to watch?'

Here are his results.



How many **more** children prefer to watch cartoons than films?

1 mark

Q4.

6 children were asked if they liked some kinds of fruits.

They had to say 'yes' or 'no'.

✓	yes
✗	no

4 children liked oranges; 2 children did not like oranges.

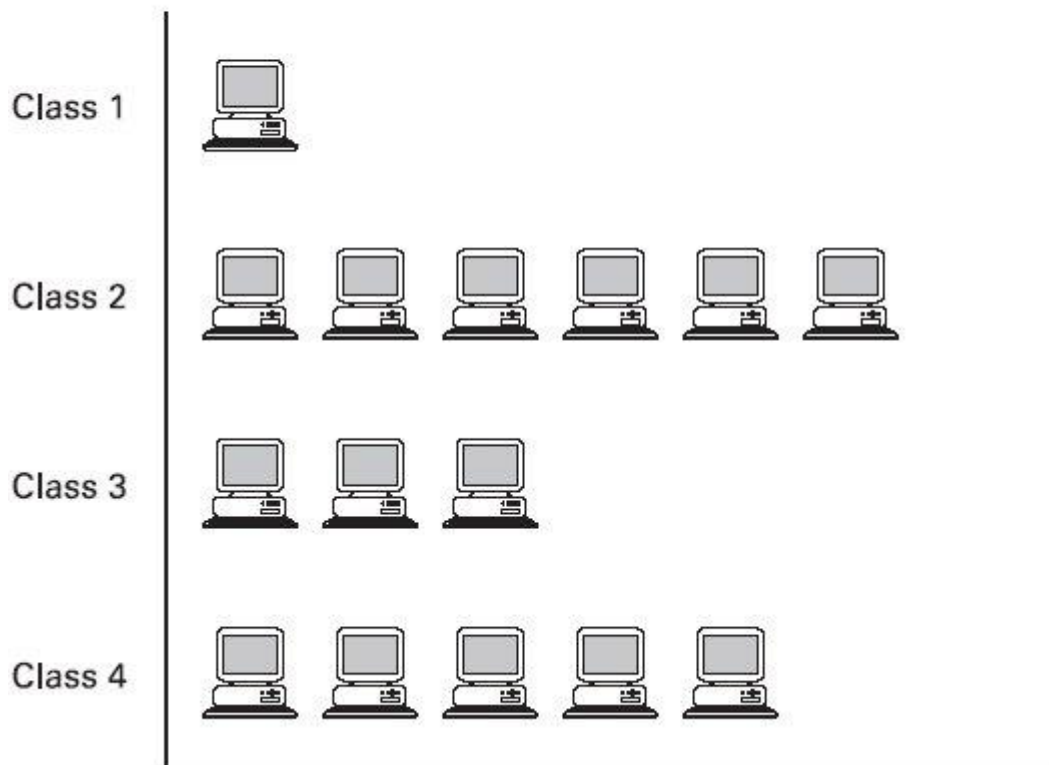
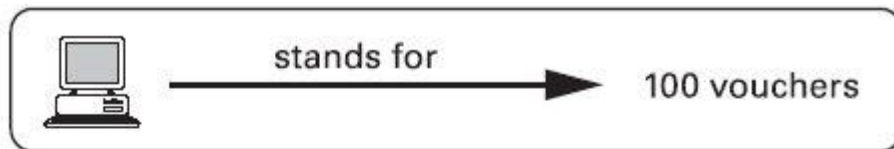
Show this on the table.

apples	✓	x	x	✓	✓	✓
pears	✓	x	✓	x	✓	✓
grapes	✓	✓	x	✓	✓	✓
bananas	✓	✓	✓	✓	✓	✓
oranges						

1 mark

Q5.

The children at Brook School collect computer vouchers.



Altogether, they need 10,000 vouchers to get a computer.

How many **more** vouchers do they need?

vouchers

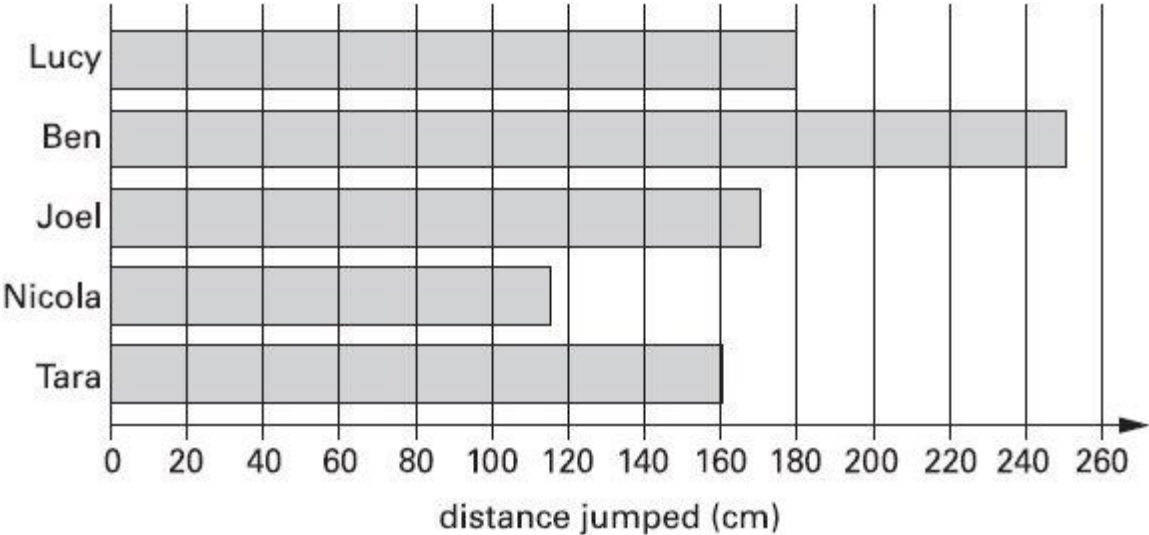
1 mark

Q6.

Some children take part in the long jump.



The graph shows the distances the children jumped.



Estimate how much further Lucy jumped than Nicola.

cm

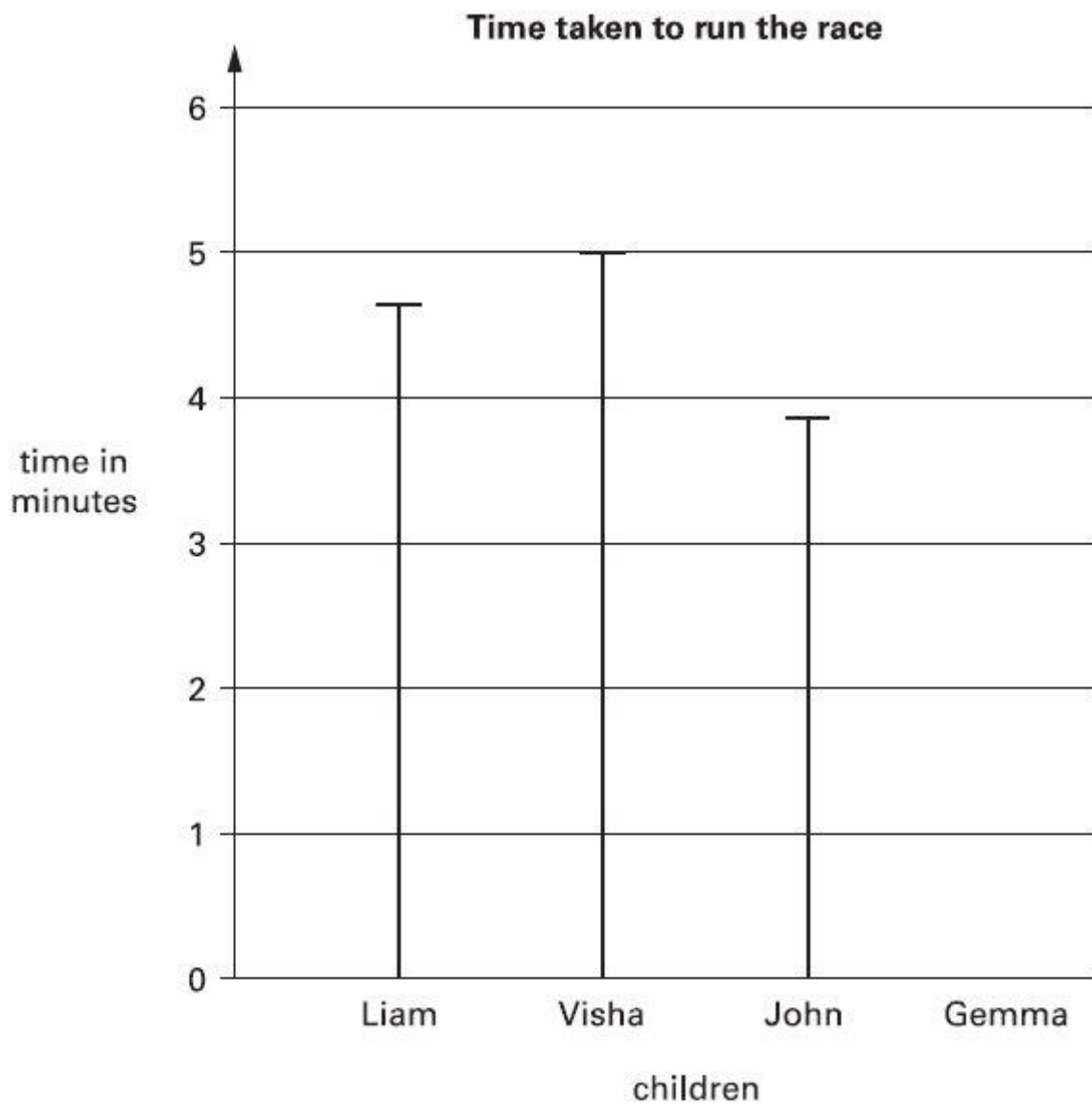
1 mark

Q7.

Four children run in a race.

Gemma takes 5 minutes 20 seconds.

Complete the graph for Gemma.

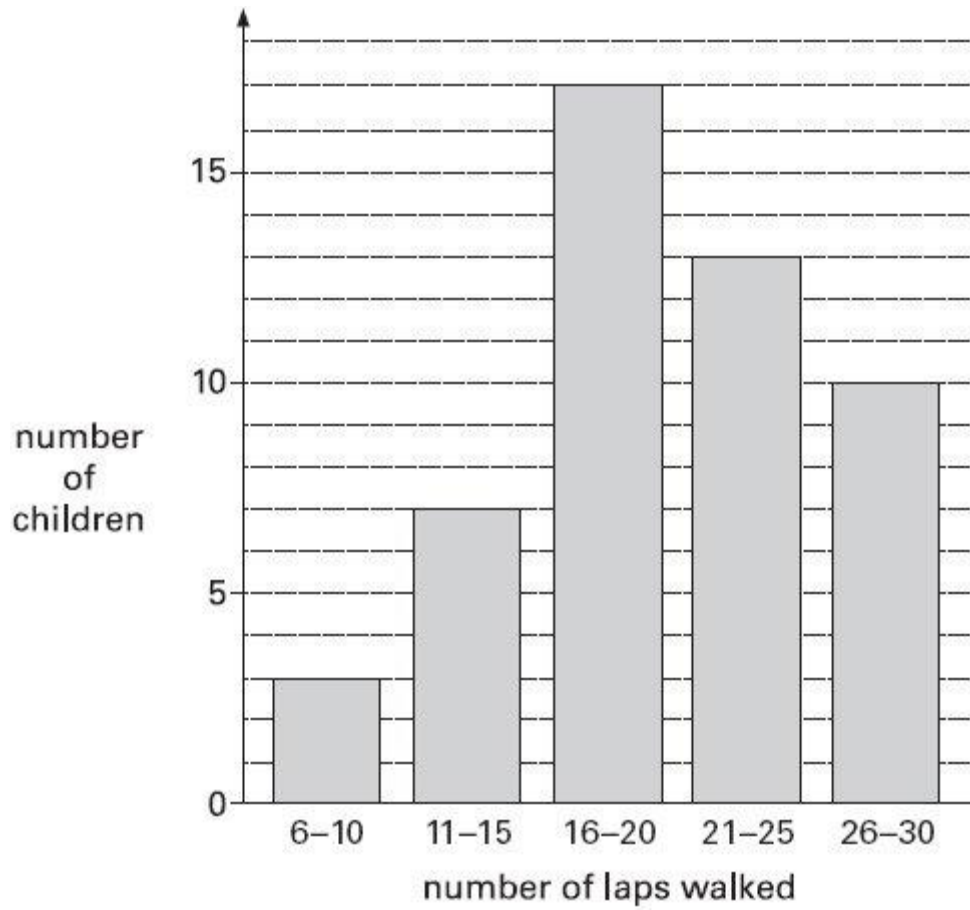


1 mark

Q8.

Some children do a sponsored walk.

The graph shows their results.

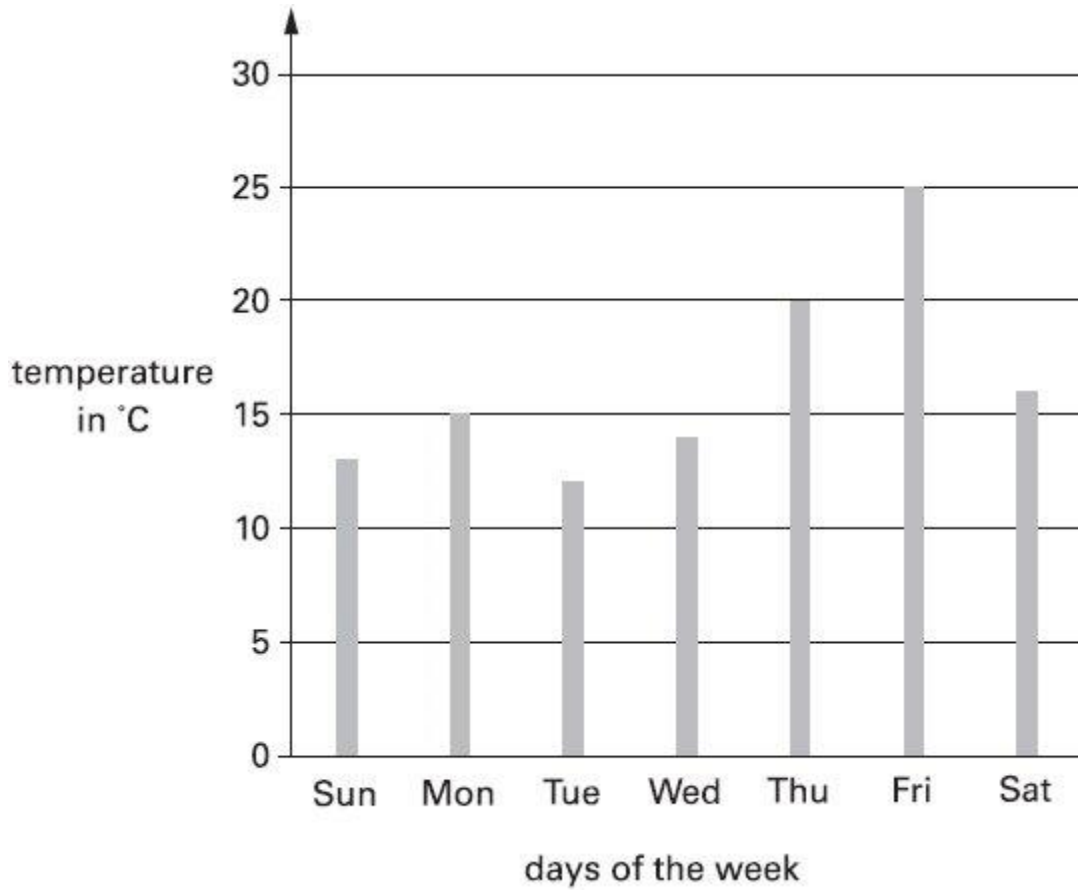


How many children walked **21 laps or more**?

1 mark

Q9.

This graph shows the temperature at midday each day for a week.



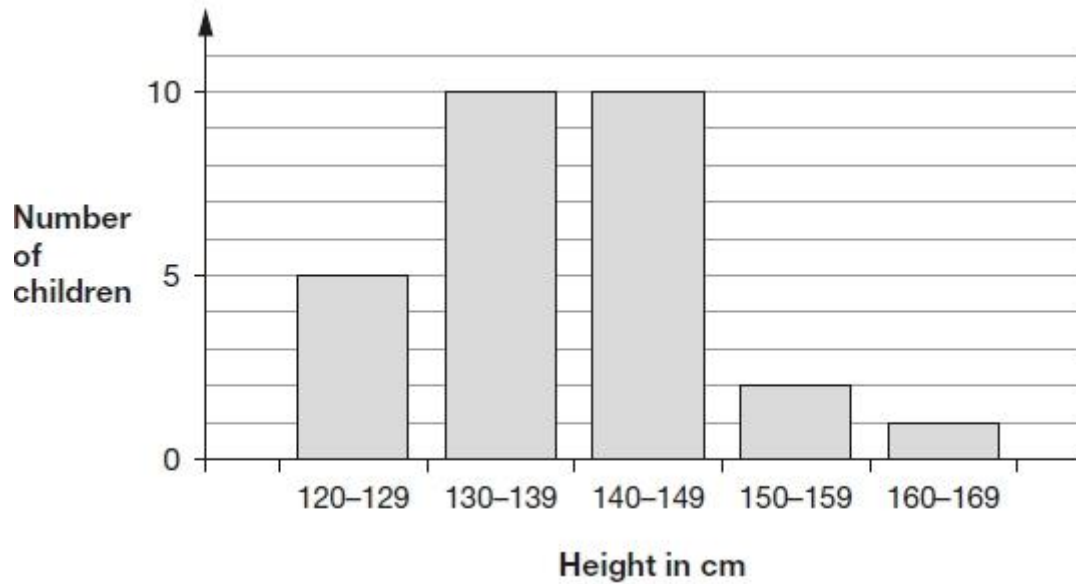
Estimate how much higher the temperature was on Friday than on Saturday.

°C

1 mark

Q10.

The graph shows the heights of 28 children in Alfie's class, to the nearest centimetre.



Alfie is 153 cm tall.

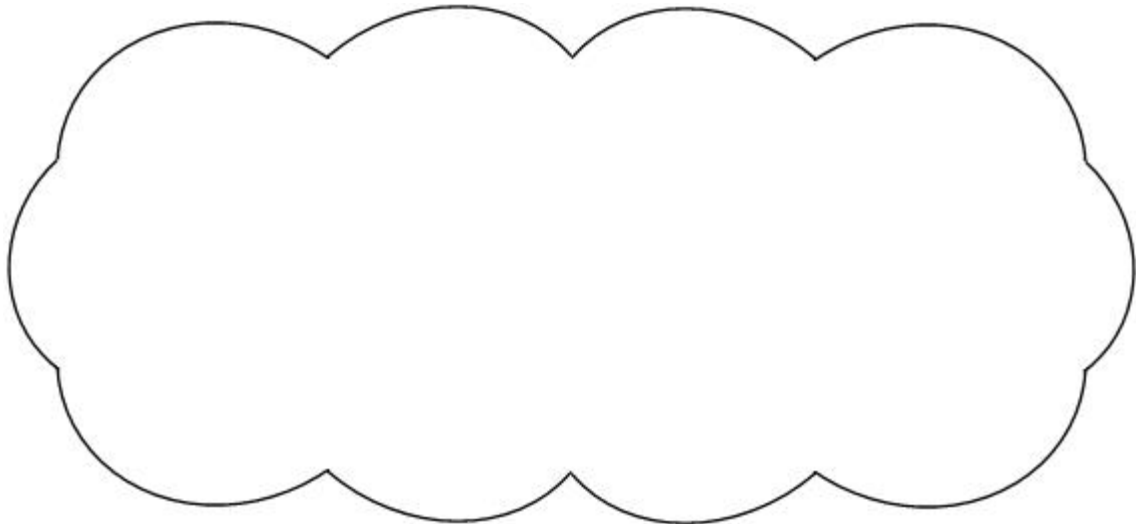
He says,

'Only one person in my class is taller than I am.'

Emma says,

'You can't tell this from the graph.'

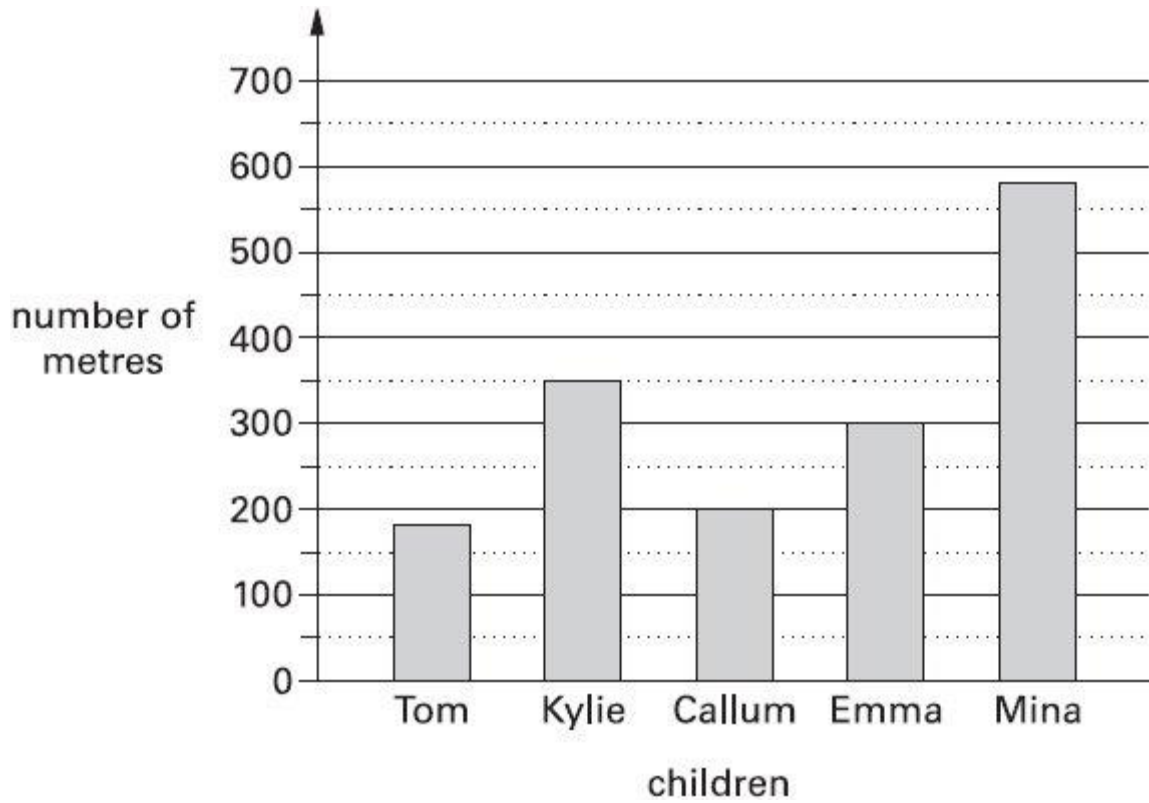
Explain why Emma is correct.



1 mark

Q11.

This graph shows the distance some children walk to school.



Who walks **between** 300 and 400 metres to school?

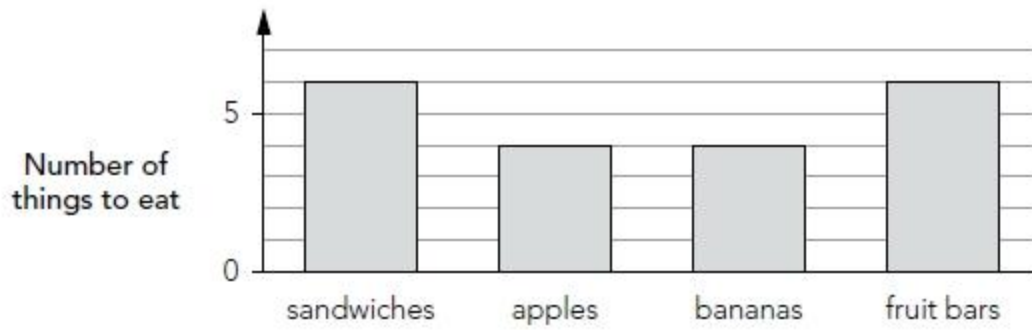
1 mark

Q12.

This table shows the number of things to eat in **five** children's lunch boxes.

	sandwiches	apples	bananas	fruit bars
Lisa	1	2	0	2
Jack	2	0	2	1
Kemi	1	1	0	2
Nik	1	2	1	0
Ben	2	1	2	1

Here is a graph of the information for **four** of the children.



Which child's information is missing from the graph?

Explain how you know.

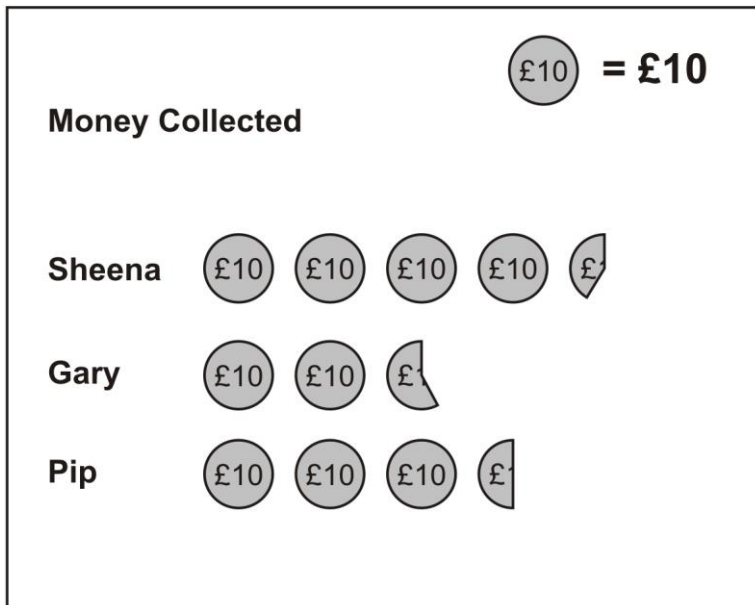
1 mark

Q13.

Three children do a sponsored silence.



This is a chart of the money they collected.



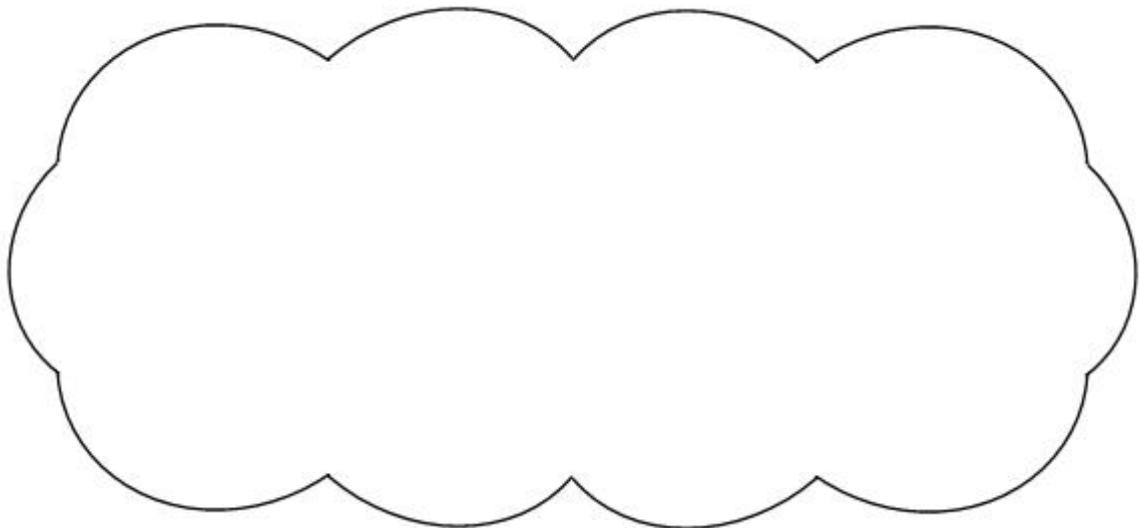
Estimate how much **Sheena** collected.

£

1 mark

Together **Gary** and **Pip** collected **more than £60**

Explain how the **chart** shows this.



1 mark

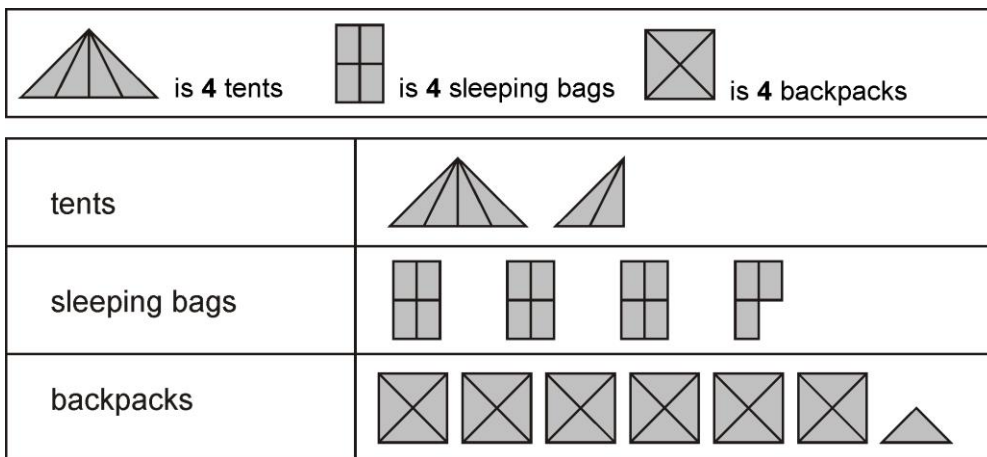
Q14.



A camping shop sells **tents**, **sleeping bags** and **backpacks**.

This chart shows how many of each they sold in June.

Items sold in June



The shop had **20** sleeping bags at the **beginning of June**.

How many of these sleeping bags did the shop have left at the **end of June**?

1 mark

In **July**, the shop sold **three times as many tents** as in June.

How many tents did the shop sell in **July**?

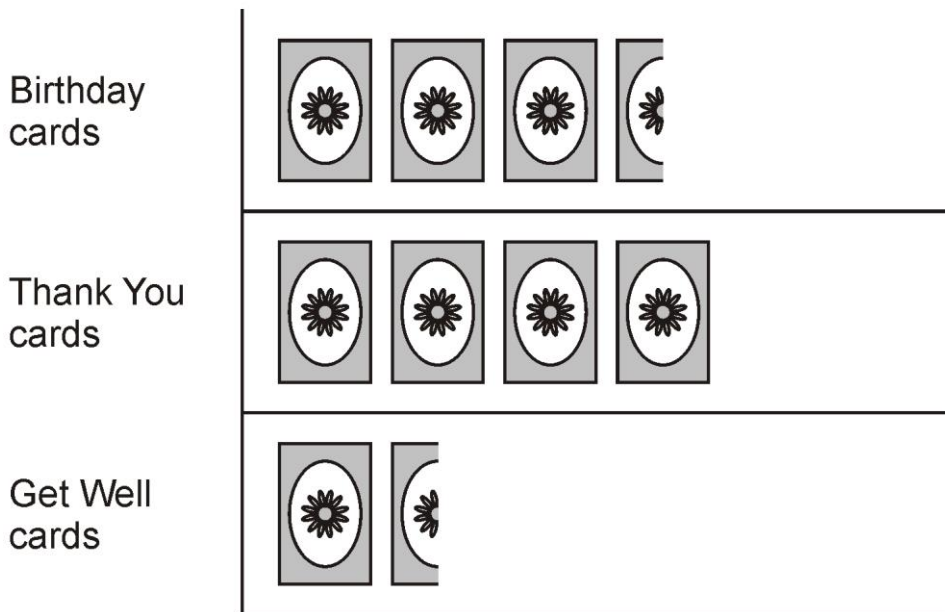
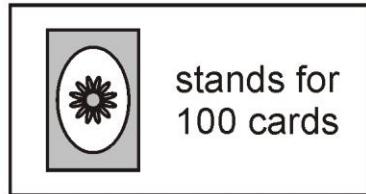
1 mark

Q15.

A shop sells different kinds of greeting cards.



This pictogram shows how many they sold in a week.



Estimate how many Birthday cards were sold.

1 mark

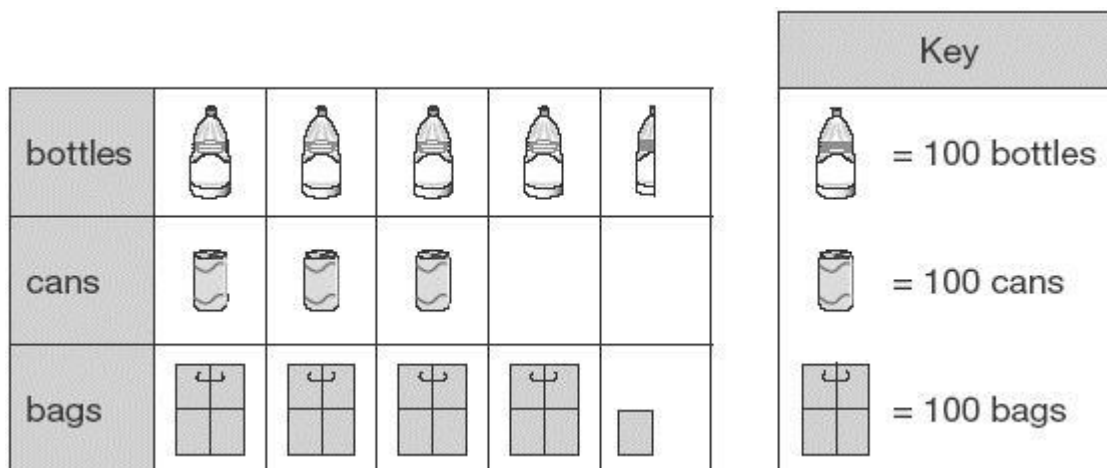
Estimate how many more Thank You cards than Get Well cards were sold.

1 mark

Q16.

Class 6 collect litter from a park.

This chart shows some of the litter they have collected so far.



How many bottles have Class 6 collected?

1 mark

How many **more** bags than cans have they collected?

1 mark

Mark schemes

Q1.

2,250

Do not accept $2000\frac{1}{4}$ *OR* $2\frac{1}{4}$ *OR* 2.25

[1]

Q2.

Hazel's height (135 cm) correctly shown on graph

[1]

Q3.

7

[1]

Q4.

4 ticks and 2 crosses on table for oranges

Ticks and crosses can be in any order.

[1]

Q5.

8500

[1]

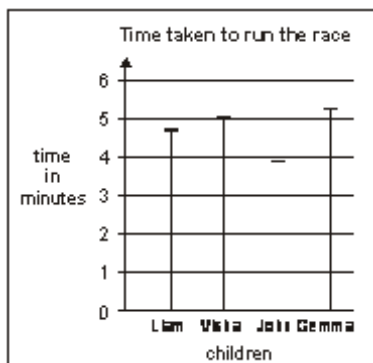
Q6.

Answer in the range 61 to 69 inclusive.

[1]

Q7.

Graph completed as shown:



Line drawn between 10.4 cm and 10.9 cm inclusive.

Accept slight inaccuracies in drawing, provided the intention is clear.

Accept line drawn with or without a horizontal finish.

[1]

Q8.

23

[1]

Q9.

Answer in the range 8 to 9 inclusive.

[1]

Q10.

Gives a correct explanation which demonstrates how the graph shows two children could be taller than Alfie, eg:

- One person from the class is 160-169cm. But someone as well as this person could be taller than Alfie. 2 people range from 150-159 cm, the other person could be 154, 155, etc

Minimally acceptable explanation, eg:

- *It could be 1.64, 1.56, Alfie*
- *It depends on how tall the other person in his height group is*
- *There could be someone between 150-159 cm who is taller than Alfie*

! Condone incorrect use of boundary values, eg:

- *One child is in the range 160 cm–169 cm.
Don't know how tall the other child between 150 cm and 159 cm is*

Do not accept incomplete or incorrect explanation, eg:

- *There is 1 child in the range 150 cm-159 cm taller than Alfie*
- *There could be two children taller than Alfie*

[1]

Q11.

Kylie

Accept any reasonable spelling, provided the intention is clear.

[1]

Q12.

Indicates Nik and gives a correct explanation
eg

- 1 sandwich, 2 apples and 1 banana is missing from the graph and that is what Nik had in his lunch box
- The graph shows the correct number of fruit bars and Nik is the only one who does not have a fruit bar in his lunch box so his must be the missing one

- The totals from the table are 7, 6, 5, 6, and from the graph 6, 4, 4, 6, and the difference is Nik

Accept minimally acceptable explanation

eg

- 1 sandwich, 2 apples, 1 banana
- Because the number of fruit bars is correct
- 1 banana missing
- 7, 6, 5, 6 and 6, 4, 4, 6 seen

Do not accept *incorrect or incomplete explanation*

eg

- 1 sandwich, 2 apples
- There are 6 fruit bars
- 2 apples are missing

U1

[1]

Q13.

- (a) Answer in the range of £43 to £44 inclusive.

1

- (b) Explanation which implies that Gary has an amount greater than £25 but less than £27.50 and that Pip has £35±1, so that their total is greater than £60, eg

- 'Gary has 26 Pip has 35';
- 'The chart shows that Gary has 2 and $\frac{2}{3}$ and Pip has 3 and a half, so that's over 60 pounds';
- 'The whole symbols together make 50 and then it's 2 halves and Pip has half and Gary has more than half'.

Do not accept *vague or arbitrary answers, eg*

- 'By the number of coins';
- 'There are 5 ten pounds and 2 halves';
- 'A coin = 10 pounds and a broken coin = a fraction of a coin so a fraction of the money'.

1

[2]

Q14.

- (a) 5

1

- (b) 18

1

[2]

Q15.

- (a) Answer in the range 340 to 360 inclusive.

1

- (b) Answer in the range 240 to 260 inclusive.

1

[2]

Q16.

(a) 450

Accept an answer in the range 440 to 460 inclusive.

1

(b) 125

1

[2]