Q1.

This table shows how many people finished the New York Marathon in each of the first four decades it was held.

New York Marathon	
Decade	**Total number of people who finished**
1st decade	24,863
2nd decade	170,932
3rd decade	282,420
4th decade	350,824

What is the mean number of people who finished the marathon per decade? Round your answer to the **nearest hundred**.

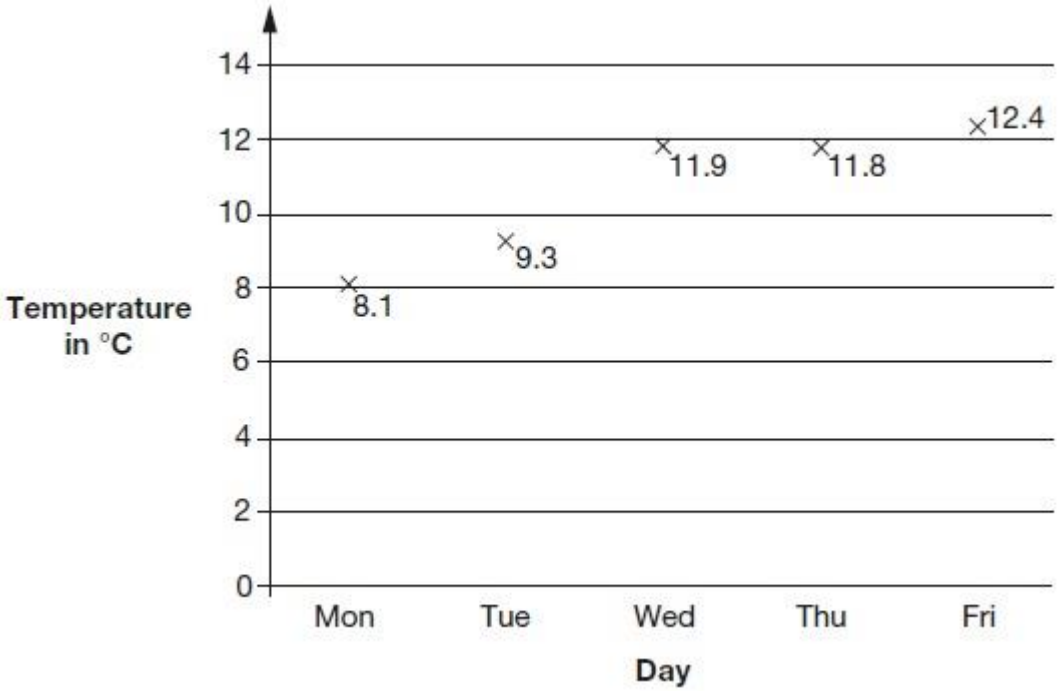
3 marks

Show your method

people

Q2.

This graph shows the maximum temperature for five days.



For what fraction of the five days was the maximum temperature below 10°C?

1 mark

What was the **mean** maximum temperature, to one decimal place?

Show your method

°C

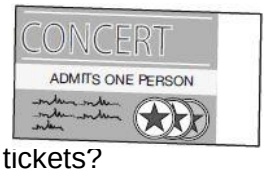
2 marks

Q3.

Last year, Jacob went to four concerts.

Three of his tickets cost £5 each.

The other ticket cost £7



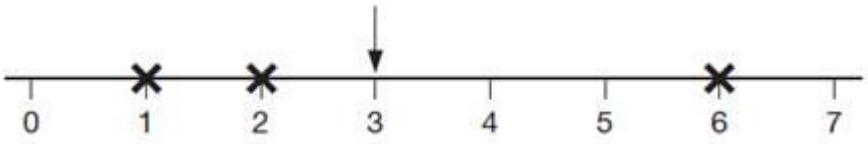
What was the **mean** cost of the tickets?

Show your method

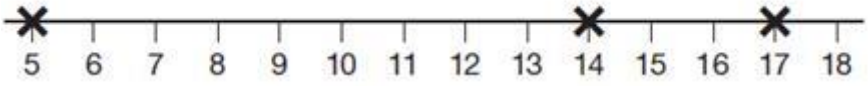
£

Q4.

The arrow below points to the **mean** of the three numbers shown by crosses.



(a) Draw an arrow that points to the mean of the three numbers shown below.

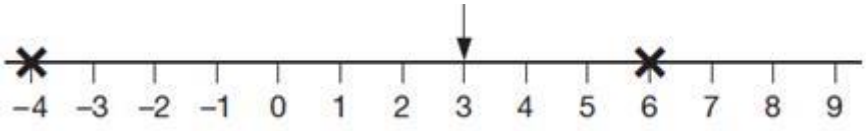


1 mark

(b) The arrow below points to the mean of three numbers.

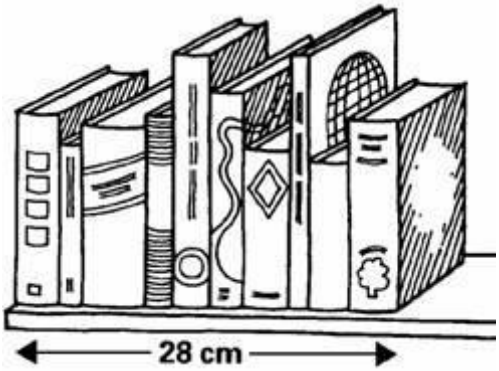
One of the numbers is missing.

Draw a cross to show the position of the missing number.



1 mark

Q5.



Vicki puts 10 books on a shelf.

The **10 books** take up **28 centimetres**.

What is the **mean (average)** thickness of her books?

Show your method

cm

2 marks

The shelf is **120 centimetres** long.

Vicki fills the shelf with a mixture of books like the **first ten books.**

Estimate how many books she can get on the **120 cm shelf**.

Show your method

2 marks

Q6.

Megan goes on a walking holiday for five days.

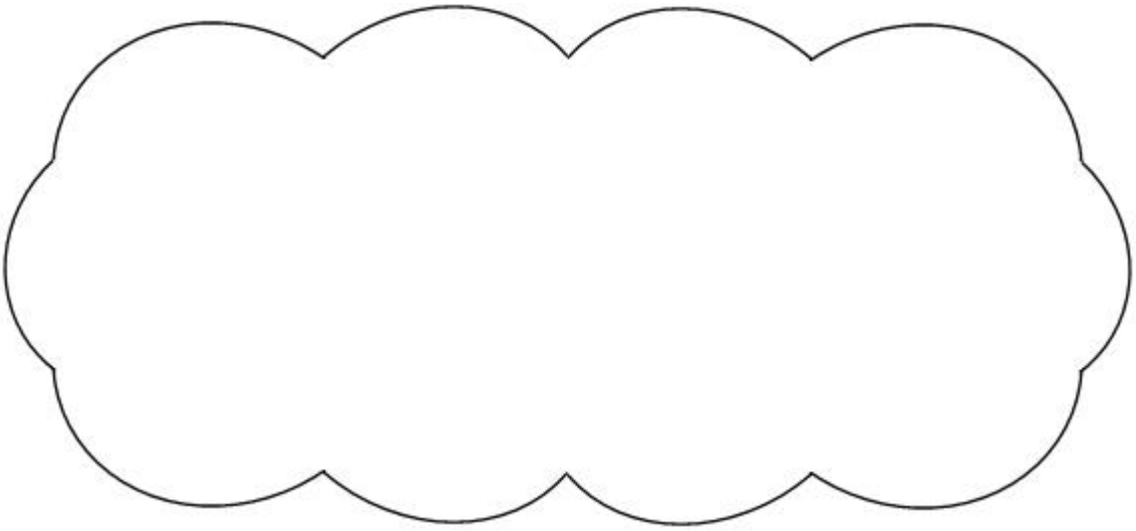
The table shows how far she walked on the first four days.

Monday	Tuesday	Wednesday	Thursday
14 km	23 km	13 km	13 km

Megan says,

'My average for the first four days is more than 15 km.'

Explain why Megan is **correct**.

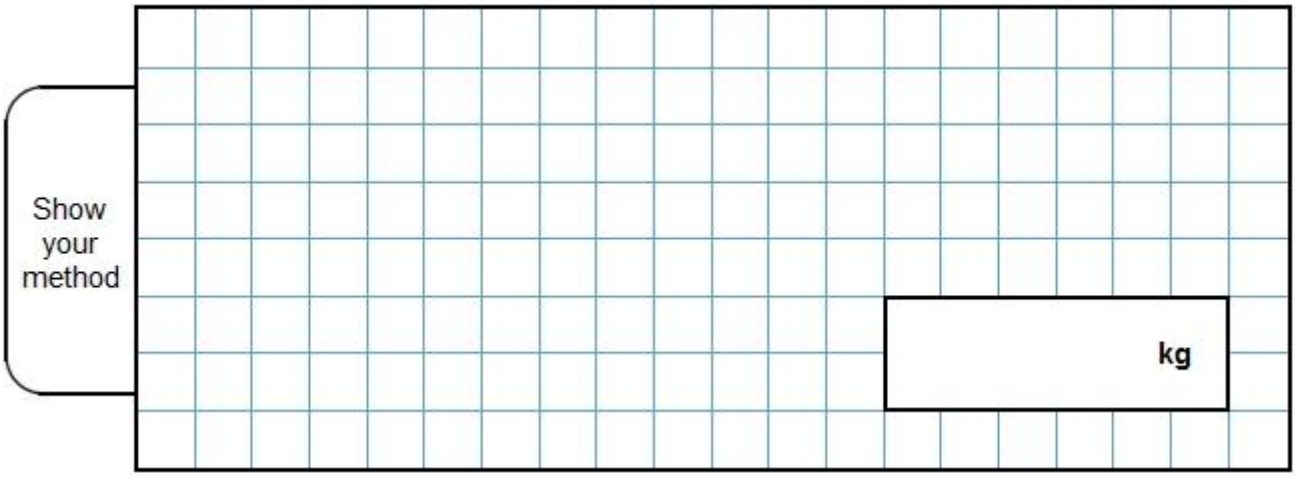


1 mark

Friday is her last day.

She wants to increase her average to **17 km**.

How many kilometres must she walk on Friday?



2 marks

Q7.

Seven children measured their heights.

What is the mean height of the children?

Children	Height (cm)
Stefan	144
Lara	136
Olivia	142
Chen	143
Maria	152
Dev	148
Sarah	150

Show your method

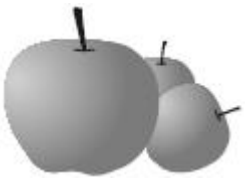
cm

Q8

Three apples have a **mean** (average) mass of 100 grams.

The largest apple is removed.

The **mean** mass of the remaining two apples is 70 grams.



What is the mass of the largest apple?

Show your method

g

2 marks

[2]