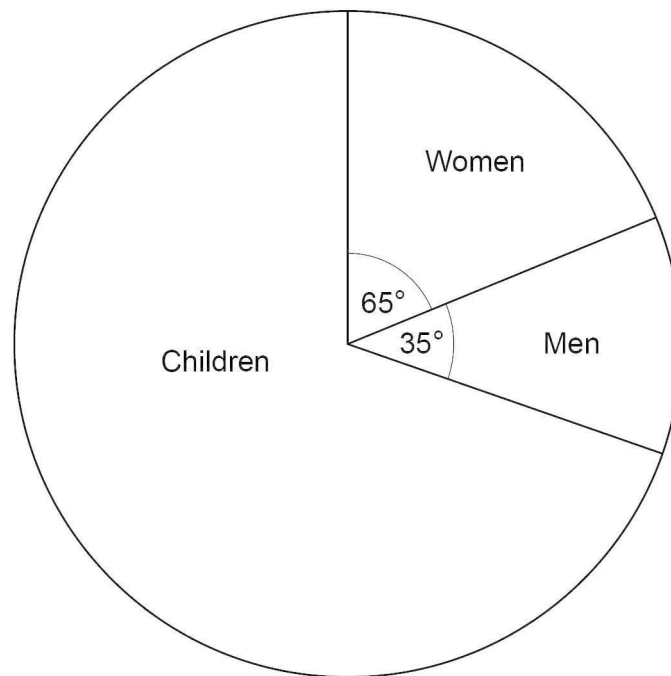


- 1 The pie chart shows information about people at a theme park.



Not drawn accurately

There were 450 **more** women than men.

Work out the number of children.

[3 marks]

$$65^\circ - 35^\circ = 30^\circ$$

$$30^\circ = 450$$

(1)

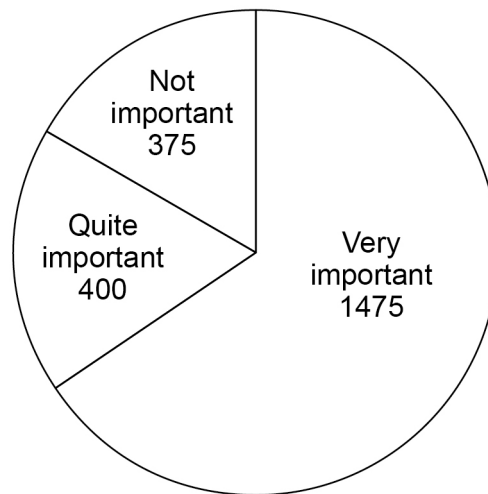
$$\text{children} = 360^\circ - 65^\circ - 35^\circ = 260^\circ$$

$$\text{No. of children} = \frac{260^\circ}{30^\circ} \times 450 = 3900$$

(1)

Answer 3900 (1)

- 2 A survey was held in a football stadium.
A sample of the crowd was asked about the importance of a family area.
The pie chart represents the answers.



- 2 (a) The total number of people in the crowd was 29 250
Estimate how many people in the crowd think that a family area is **very important**.
Assume that the sample is representative of the crowd.

[3 marks]

$$\text{Total sample} = 375 + 400 + 1475 = 2250 \quad (1)$$

$$\frac{1475}{2250} \times 29\,250 = 19\,175 \quad (1)$$

Answer 19 175 (1)

2 (b) In fact,

50% of the **sample** were sitting in the family area

10% of the **crowd** were sitting in the family area.

What is this likely to mean about the actual number of people in the crowd who think that a family area is very important?

Tick **one** box.

[1 mark]

☐

It is larger than the answer to part (a)

☐

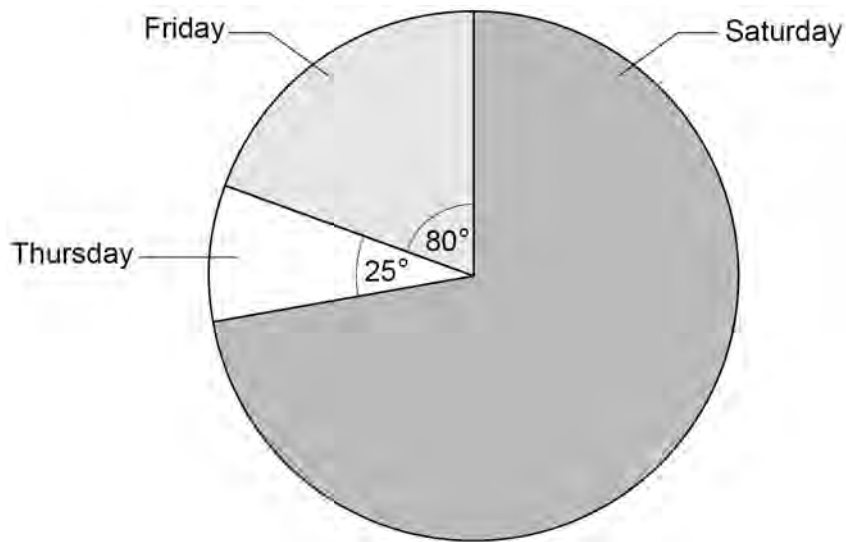
It is the same as the answer to part (a)

☒

It is lower than the answer to part (a)

3

The pie chart shows information about people at a fair during three days.



There were 132 **more** people on Friday than on Thursday.

Work out the number of people on Saturday.

[3 marks]

$$80 - 25 = 55 \quad (1)$$

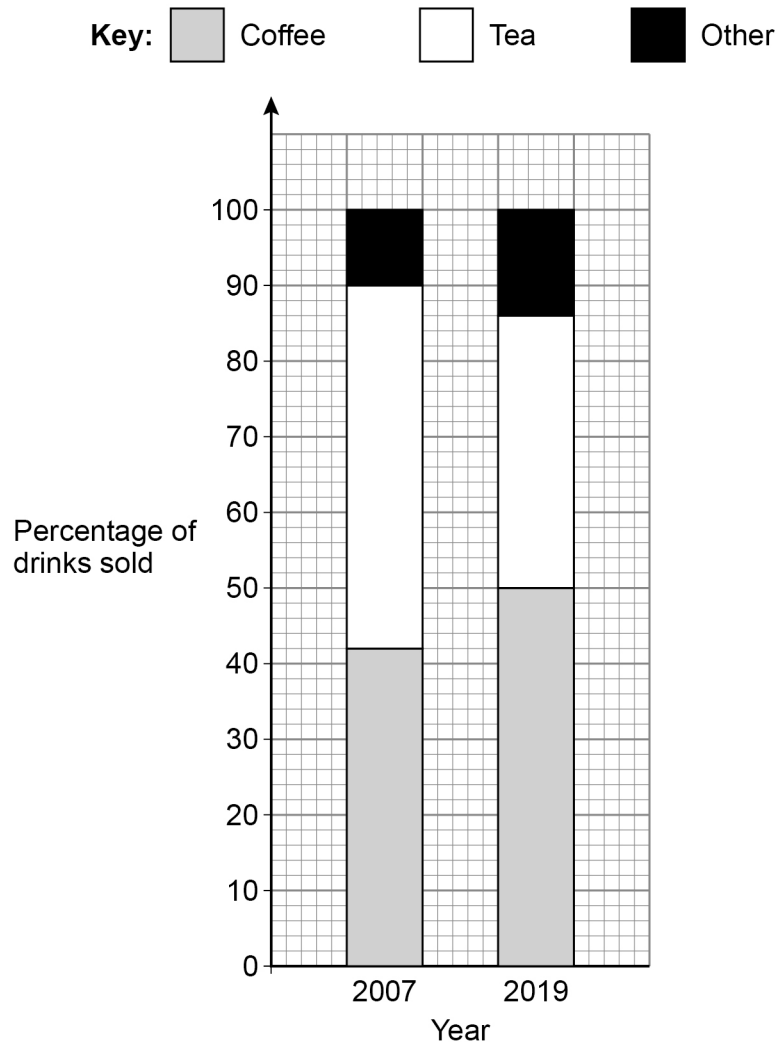
$$\frac{132}{55} = 2.4 \text{ people per } 1 \text{ degree}$$

$$\text{Saturday} : 360 - 80 - 25 = 255 \text{ degree} \quad (1)$$

$$\text{No. of people on Saturday} = 255 \times 2.4 = 612 \quad (1)$$

Answer 612

- 4 The composite bar chart shows information about the **percentage** of drinks sold by a café in 2007 and 2019



- 4 (a) In 2007 the café sold a total of 24 000 drinks.

How many **more** teas than coffees were sold?

[2 marks]

$$\text{Tea : } 90 - 42 = 48 \%$$

$$\text{Coffee : } 42 \%$$

$$48 - 42 = 6 \%$$

$$\frac{6}{100} \times 24000 = 1440$$

Answer 1440

4 (b)

Were more coffees sold at the café in 2019 than in 2007 ?

Tick a box.

☐

Yes

☐

No

☒

Cannot tell

Give a reason for your answer.

[1 mark]

The total numbers sold in 2019 were unknown.

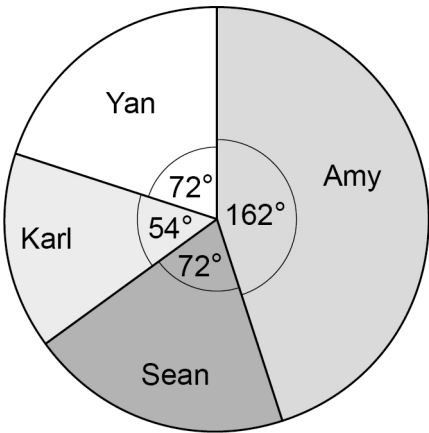


5 Four people are taking part in a television talent show.

Here are Amy's marks from the 6 judges.

8	9	9	6	9	10
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The pie chart represents the phone vote.



Amy's total score is found by

$$4 \times \text{the mean of her marks}$$
$$+$$
$$\text{her percentage of the phone vote}$$

Work out Amy's total score.

[4 marks]

$$\text{mean of marks} = \frac{8+9+9+6+9+10}{6} = 8.5 \quad \checkmark (1)$$

$$\text{Percentage of phone vote} = \frac{162^\circ}{360^\circ} \times 100\% = 45\% \quad \checkmark (1)$$

$$\begin{aligned} \text{Total score} &= (4 \times 8.5) + 45 \quad \checkmark (1) \\ &= 79 \quad \checkmark (1) \end{aligned}$$

Answer 79