Q1.

80 people were asked if they owned a pet.

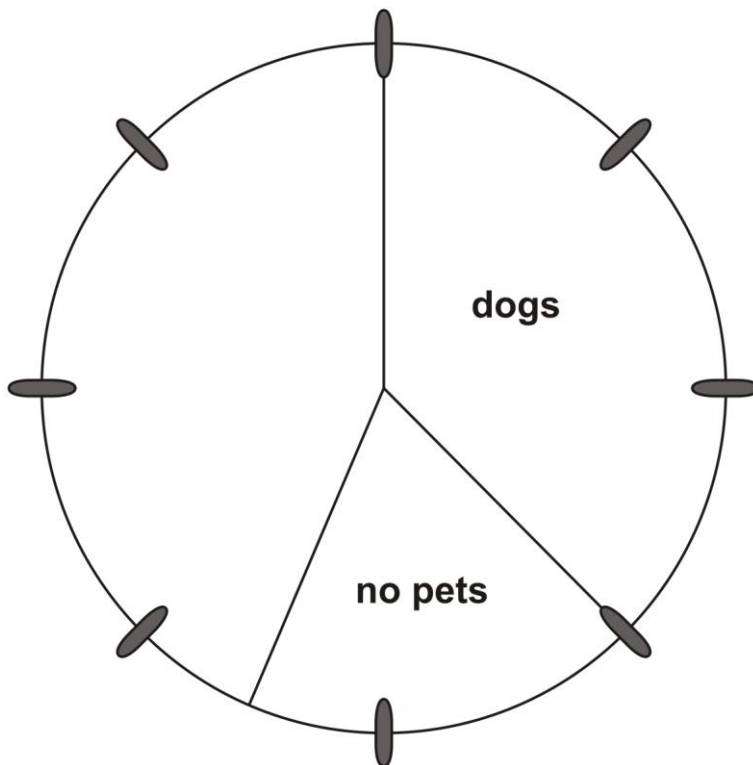**30** had **dogs**

25 had **cats**

10 had other **pets**

15 had no **pets**

Complete the pie chart to show this information.

2 marks

Q2.

In a survey of children's favourite fruit juices, these were the results.

Juice	Apple	Orange	Grape	Mango
Percentage of children	25%	14%	30%	31%

(a) **20 more** children chose grape than chose apple.

How many children took part in the survey?
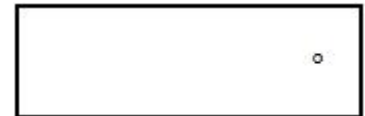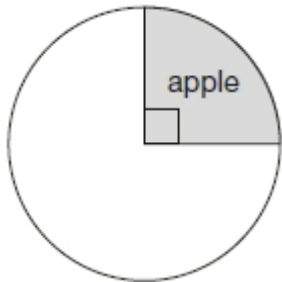
children

2 marks

(b)   Chen makes a pie chart to show the results.

What **angle** should he use for the children who chose **mango**?
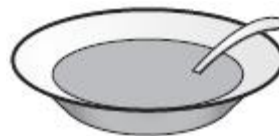
apple

°

1 mark

Q3.

Alfie did a survey to find which soup was most popular.

The choices were:

- tomato

- chicken

- mushroom

A quarter of the children chose chicken soup.

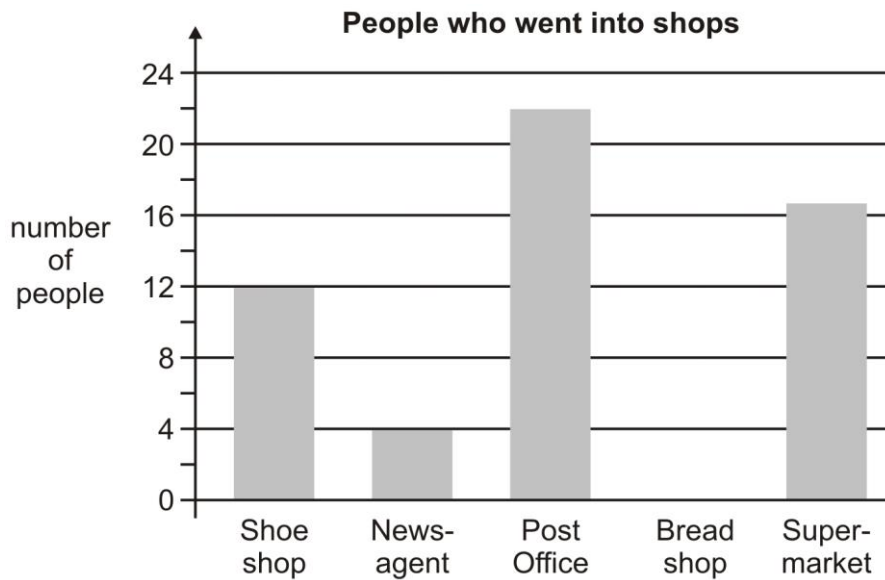Four times as many children chose tomato soup as chose mushroom soup.

Alfie makes a pie chart to show this information.

What **angle** should he use for the children who chose tomato soup?

3 marks

Q4.

Chris did a survey of the number of people who went into shops in one hour.

Number of people who went into a shop |||| stands for 5 people	
Shoe shop	|||| |||| ||
Newsagent	||||
Post Office	|||| |||| |||| |||| ||
Bread shop	|||| |||| |||
Supermarket	|||| |||| |||| ||

How many people went into the **Supermarket** in the hour?

1 mark

How many **more** people went into the **Post Office** than the **Shoe shop**?

Here is part of a bar chart of the information.

Draw in the **missing** bar.

People who went into shops

1 mark

Q5.

This is what it costs to visit a castle.

Allington Castle
Cost per person

Adults	£2.45
Children (11 and over)	£1.30
Children (under 11)	95p

Helen is 10 years 9 months old.

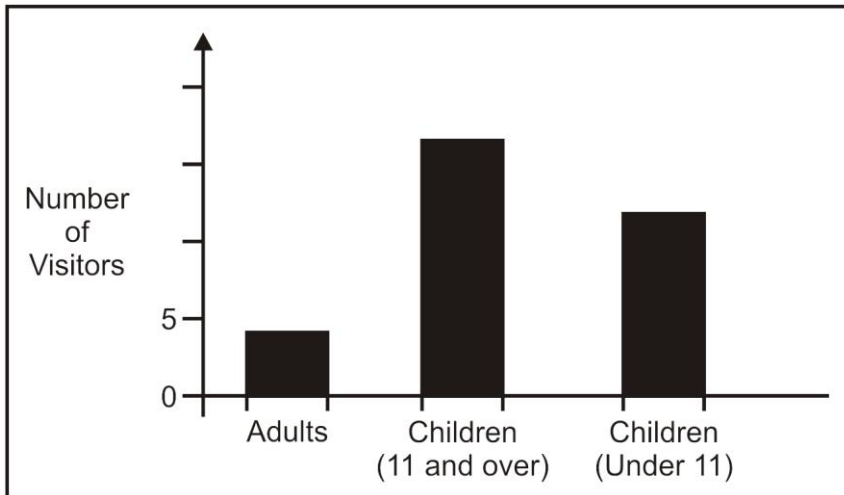How much will it cost Helen to visit?

1 mark

On one day the number of visitors was

Adults	**4**
Children (11 and over)	**16**
Children (under 11)	**12**

Here is a graph to show the number of visitors.

Complete the scale for the axis called "Number of Visitors".

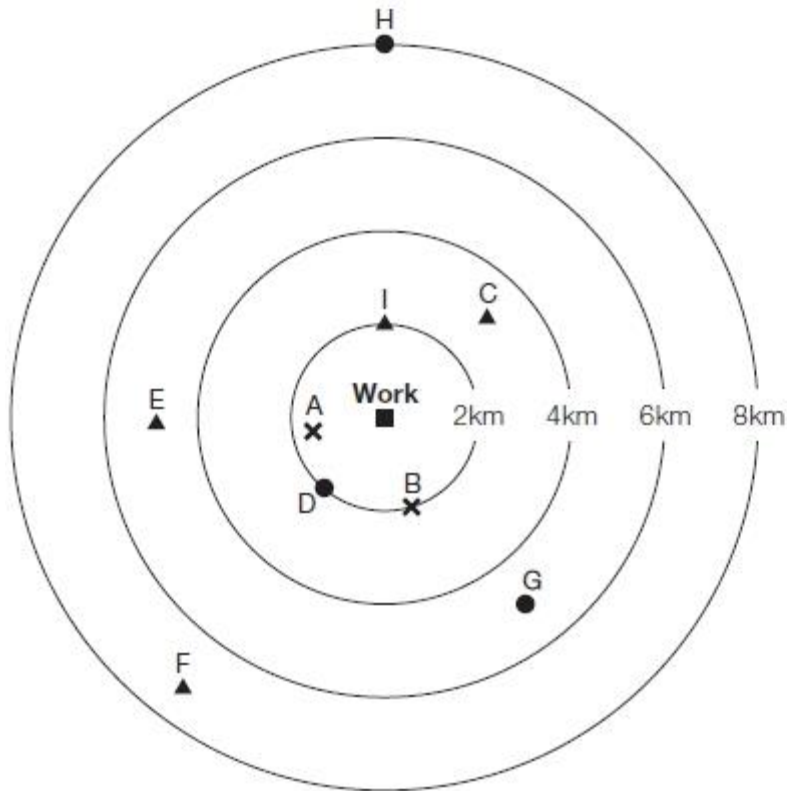How much will it cost for **18 children** (under 11) to visit the castle?

You **must** show your working.

Q6.

This diagram shows how nine people travel to work and how far away they live.

How many people live **more** than 4 km from work?

people

1 mark

How far from work does person **G** live?

km

1 mark

Write the letter of the person who lives 2 km from work and cycles.

1 mark

Q7.

On sports day children get points for how far they jump.

Standing Long Jump		
Over	80cm	1 point
Over	100cm	2 points
Over	120cm	3 points
Over	140cm	4 points
Over	160cm	5 points
Over	180cm	6 points

Joe jumped 138cm.

How many points does he get?

points

1 mark

Sam said, **"I jumped 1.5 metres. I get 4 points".**
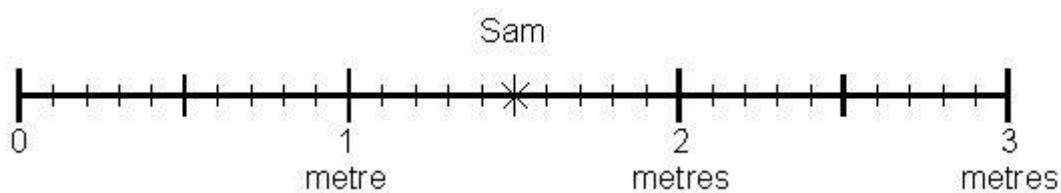
Give a reason why Sam is correct.

_____

_____

1 mark

Each child puts a cross on a line to show how far they jumped.

Sam puts her cross at 1.5 metres.

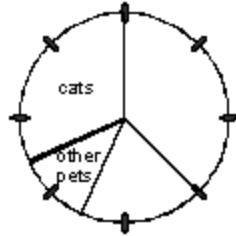Lynn jumps **1.14** metres.

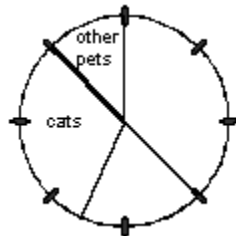Put a cross on the line for Lynn's jump.

1 mark

Mark schemes

Q1.

2 marks for remainder of or 2 circle correctly divided into a 'l piece' sector and a '2½ piece' sector, and labelled 'other pets' and 'cats' respectively,

or 1 mark for remainder of circle divided into a '1 piece' sector and '2½ piece' sector, but not labelled or labelled incorrectly.

[2]

Q2.

(a)   400

2

or

Shows or implies a complete correct method, eg:

*   30% − 25% = 5%

5% = 20

100% = 20 × 20

1

(b)   111.6 **or** 112
Do not accept 111

1

[3]

Q3.

216

3

or

54 seen *(angle for mushroom soup)*

OR

Shows or implies a correct method for tomato soup with not more than one computational error, eg:

- 360 − 90 = 240 *(error)*
  240 ÷ 5 = 48
  48 × 4 = 192

- 0.6 × 360

- 25% = chicken
  75% ÷ 5 = 15%
  15% of 360° = 54°
  54° × 4

2

or

Shows the angle representing tomato soup and mushroom soup is 270

OR

60% **or** $\dfrac{3}{5}$ seen (*as evidence of a correct method for tomato soup*)

OR

Shows or implies a correct method for finding the angle required to represent mushroom soup, eg:

- 360° − 90° = 260° *(error)*
  260° ÷ 5 = 40° *(error)*

OR

Shows or implies a correct method for tomato soup with more than one computational error, eg:

- 360° − 90° = 240° *(error)*
  240° × 4 ÷ 5 = 200° *(error)*

> **Do not accept** *tomato soup is 270°*
>
> **Do not accept** *methods involving drawings of pie charts, without any values given*
>
> *Accept equivalent fractions or decimals, eg:*
>
> - $\dfrac{6}{10}$
>
> - *0.6*
>
> **Do not accept** *60 or 60° for 60%*

1
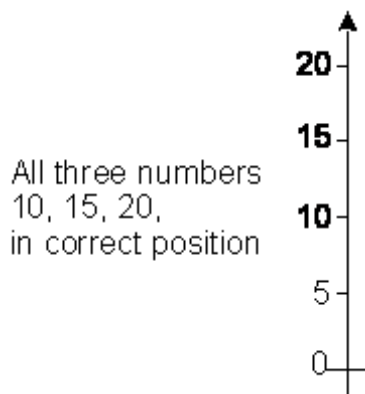
[3]

Q4.

(a)   17

1

(b)   10

1

(c)   Bar drawn to 13

Accept bars greater than 12 and less than 14
Accept unshaded bar or line.

1

[3]

Q5.

(a)   95p

*Accept £0.95 **OR** 0.95 **OR** £0.95p*
***OR** 95 **OR** 95 pence*
***OR** answers in words, in the answer box or elsewhere on the*
page.

1

(b)   All three numbers, 10, 15, 20, in correct position.

Accept any positioning of 10, 15, 20 as long as it is clear that
they refer to the marks on the axis in the correct order.

1

(c)   Award **ONE** mark for correct answer of £17.10 with evidence of any appropriate
working out of the answer, eg:

- (18 × £1) – (18 × 5p) = £18 – 90p = £17.10

- 18   18
  × 90   × 5
  1620   90   1620 + 90 = £17.10

*Accept £17.10p **OR** £17 10 **OR***
*£17 10p **OR** 1710p **OR** 17.10*
***OR** answers in words, in the answer box or elsewhere on the*
page.
*The mark can **only** be awarded if there is evidence of a*
calculation taking place. It cannot be awarded if an
expression is set out but no working is shown, eg:
- *(10 × 95) + (8 × 95) = £17.10*
- *(20 × 95) – (2 × 95) = £17.10*
- *18 × 95 = £17.10*

1

[3]

Q6.

    (a)   4

                    1

    (b)   Gives an answer in the range $4\frac{1}{2}$ km to $5\frac{1}{2}$ km exclusive.

                Do not *accept* $4\frac{1}{2}$ **OR** $5\frac{1}{2}$

                    1

    (c)   D

                    1

                    [3]

Q7.

    (a)   3

                Do not *allow 3.5* **OR** *any other decimal or fraction.*
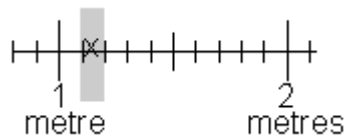
                    1

    (b)   The explanation should include evidence of conversion of 1.5m to cm **OR** 140 to 160 cm to m. This may be implicit, eg:

          •   "Because 1.5 is between 140 and 160."

          •   "She would need another 10 cm to get 5 points."

                    1

    (c)   Cross on the line **between** 1.1 and 1.2, **exclusive.**

                Accept marks other than a cross if in correct position.

                    1

                    [3]