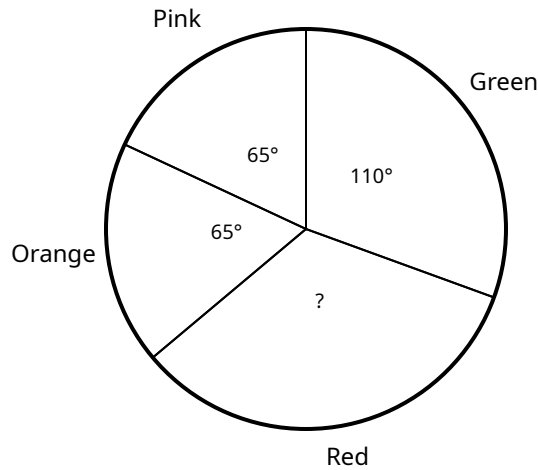




Pie Charts - set samples - paper 1

1. The pie chart below represents data collected in a survey about the favourite colours of a sample of school children.



- (a) What fraction of the children chose orange as their favourite colour? Give your answer in its lowest form.

ans _____

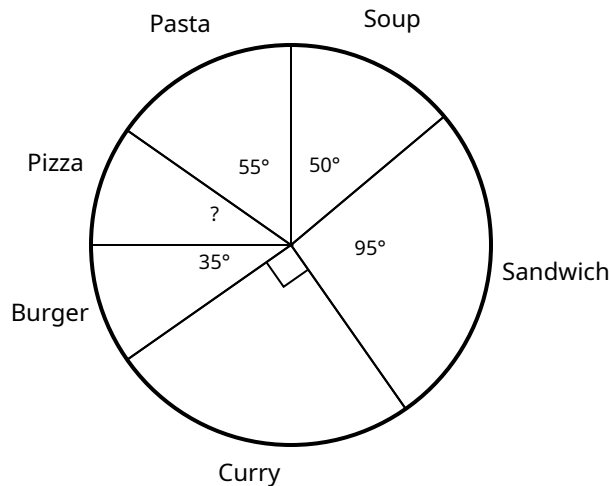
- (b) Write down, in its simplest form, the ratio of children whose favourite colour was green to those whose favourite colour was pink.

ans _____

- (c) The whole school has 936 pupils. Calculate how many children would say their favourite colour was red.

ans _____

2. The pie chart below represents data collected in a survey about the favourite meals of a sample of school children.



- (a) Calculate the angle of the sector for pizza.

ans _____

- (b) 90 children chose soup as their favourite meal. Calculate the total number of children who took part in the survey.

ans _____

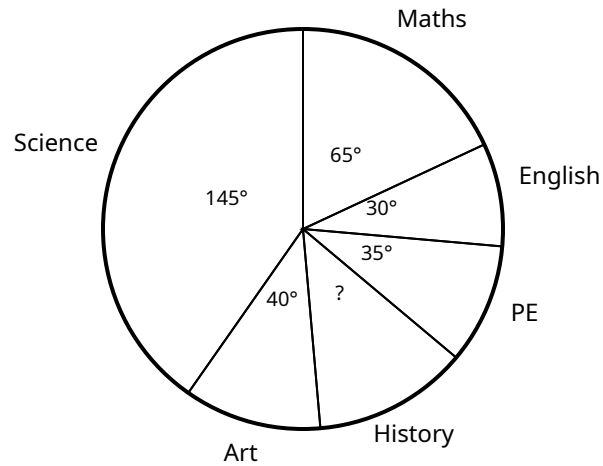
- (c) Using your answer from part (b), calculate how many children chose curry as their favourite meal.

ans _____



Pie Charts - set samples - paper 2

3. The pie chart below represents data collected in a survey about the favourite school subjects of a sample of school children.



(a) Write down, in its simplest form, the ratio of children whose favourite subject was maths to those whose favourite subject was PE.

ans _____

(b) Calculate the angle of the sector for history.

ans _____

(c) What percentage of school children chose art as their favourite subject? Give your answer to 1 decimal place.

ans _____



Pie Charts - set samples - Answers

1. (a) $\frac{65}{360} = \frac{13}{72}$

(b) $110 : 65 = 22 : 13$

(c) $360 - 110 - 65 - 65 = 120^\circ$

$$\frac{120}{360} = \frac{1}{3}$$

$$\frac{1}{3} \times 936 = 312$$

2. (a) $360 - 50 - 95 - 90 - 35 - 55 = 35^\circ$

(b) $\frac{50}{360} = \frac{5}{36}$

If $\frac{5}{36} = 90$, total = $90 \div 5 \times 36 = 648$

(c) $\frac{90}{360} = \frac{1}{4}$

$$\frac{1}{4} \times 648 = 162$$

3. (a) $65 : 35 = 13 : 7$

(b) $360 - 65 - 30 - 35 - 40 - 145 = 45^\circ$

(c) $\frac{40}{360} \times 100 = 11.1\%$