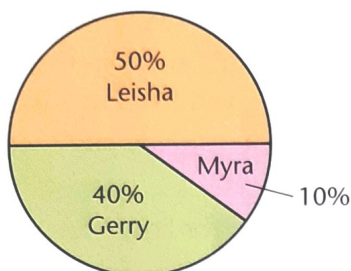**TARGET**   To interpret and construct pie charts.

Example 1

The pie chart shows the 350 votes cast for the three candidates in an election.

How many votes did each candidate receive?

Leisha	Myra	Gerry
50% of 350	10% of 350	40% of 350
350 ÷ 2	350 ÷ 10	(350 ÷ 10) × 4
175 votes	35 votes	35 × 4
		140 votes

Example 2

Draw a pie chart to show the 200 runners taking part in a fun run.

Men	100	Boys	20
Women	60	Girls	20

A. Find the angle at the centre of each sector.

Boys/Girls	Men	Women
$\frac{20}{200}$ $\frac{1}{10}$	$\frac{100}{200}$ $\frac{1}{2}$	$\frac{60}{200}$ $\frac{3}{10}$
360° ÷ 10	360° ÷ 2	(360° ÷ 10) × 3
36°	180°	36° × 3
		108°

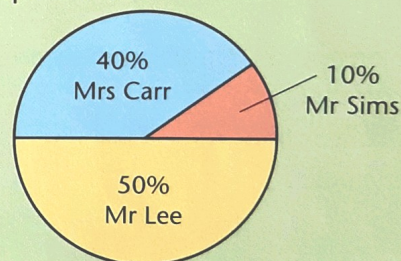**B.** Draw the pie chart.
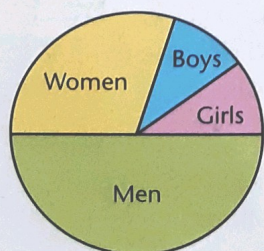
A

1 The pie chart shows how the 28 children in one class come to school.
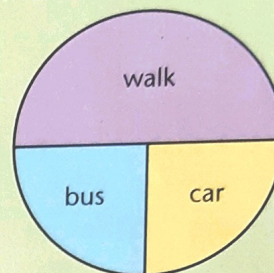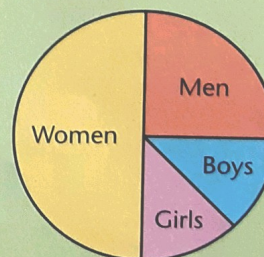

   a) How many children travel by bus?
   b) How many children walk?
   c) How many children travel by car?
   d) What is the angle at the centre of the yellow sector?

2 The pie chart shows the number of votes received by candidates for a local council. 750 people voted.

How many people voted for each candidate?

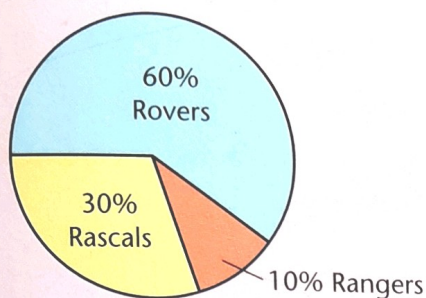3 The pie chart shows the 240 members of the audience at a cinema.

   a) How many women were in the audience?
   b) How many men?
   c) How many girls?
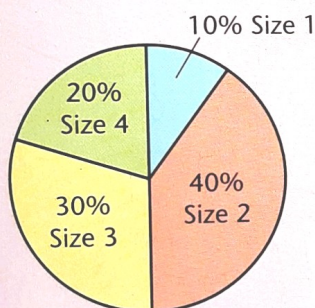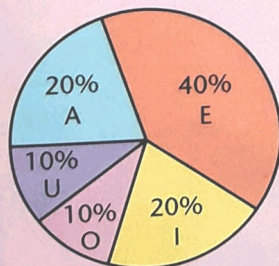   d) What is the angle at the centre of the blue sector?

B

1 The votes of 20 children choosing a name for their village football team.

60%
Rovers

30%
Rascals

10% Rangers

a) How many children voted for each name?

b) What is the angle at the centre of the red sector?

**2** The size of shoe worn by the 90 children in Year 5.

10% Size 1

20% Size 4

30% Size 3

40% Size 2

a) How many children wear each size of shoe?

b) What is the angle at the centre of each sector?

3 The first 300 vowels in a book.

20% A

40% E

10% U

10% O

20% I

a) How many are there of each vowel?

b) Construct the pie chart.

C

1 The instruments played by the 60 members of an orchestra.

50% strings

5% percussion

20% brass

25% wood-wind
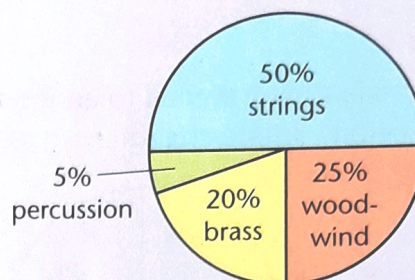
a) How many players are there in each section of the orchestra?

b) What is the angle at the centre of the green sector?

2 How 500 people prefer to eat eggs.

25% fried

20% boiled

10% poached

45% scrambled
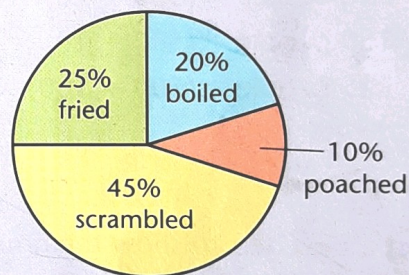
a) How many of the people asked preferred each of the four ways of cooking eggs?

b) Give the angle at the centre of each sector.

3 Eighty golfers played in a tournament. These are the scores they made at the most difficult hole on the course.

10% 4

40% 5

5% 3

10% 7

35% 6
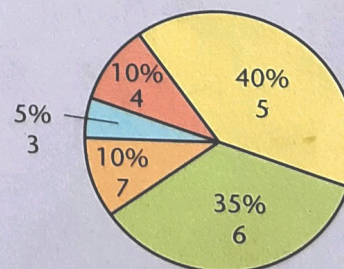
a) How many golfers made each score?

b) Construct the pie chart.