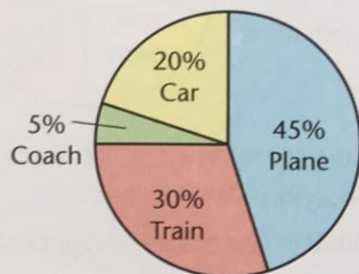# PIE CHARTS 2

TARGET To interpret and construct pie charts.

Example 1

How 500 scientists travelled to an international conference on climate change.
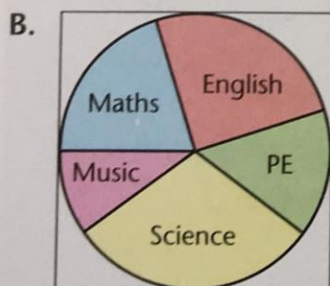

How many people used each form of transport?

Car	100 people	(500 ÷ 10) × 2
Coach	25 people	(500 ÷ 10) ÷ 2
Train	150 people	(500 ÷ 10) × 3
Plane	225 people	(500 ÷ 100) × 45

Example 2

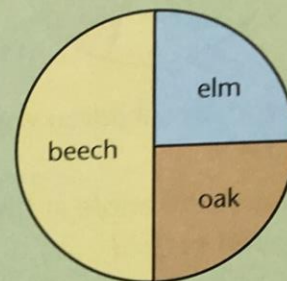Construct a pie chart to show the time given to each subject in Year 6 on Tuesdays.

Maths	60 mins	A. Find the angle at
English	75 mins.	the centre of each
P.E.	45 mins.	sector.
Science	90 mins.	B. Construct the pie
Music	30 mins.	chart.
Total	300 mins.	

A. Maths $\frac{60}{300}\ \frac{1}{5}$ 360° ÷ 5 = 72°

English $\frac{75}{300}\ \frac{1}{4}$ 360° ÷ 4 = 90°

P.E. $\frac{45}{300}\ \frac{3}{20}$ (360° ÷ 20) × 3 = 54°

Science $\frac{90}{300}\ \frac{3}{10}$ (360° ÷ 10) × 3 = 108°

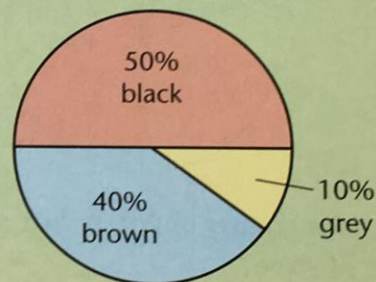Music $\frac{30}{300}\ \frac{1}{10}$ 360° ÷ 10 = 36°

B.

A

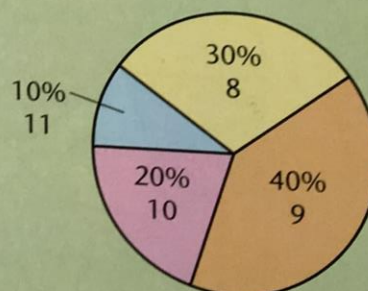**1** The pie chart shows the 56 new trees planted in a wood.

a) How many of each type of tree were planted?

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

2 The colours of 200 shoes sold in a shop.

a) How many shoes of each colour were sold?

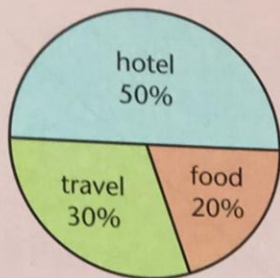b) Give the angle at the centre of the yellow sector.
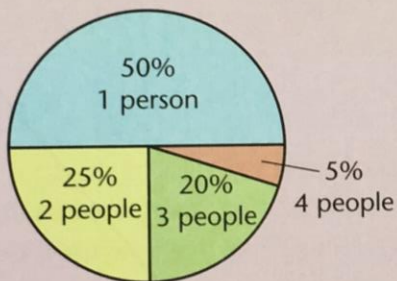
3 The ages of 30 children at a party.

a) How many children of each age were at the party?

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

B

Lindy's holiday cost £1500. The pie chart shows how the money was spent.

1 How much did Lindy spend on:

  a) her hotel   **b)** food   **c)** travel?

2 Give the angle at the centre of each sector.

3 The number of people travelling in each of 120 cars.
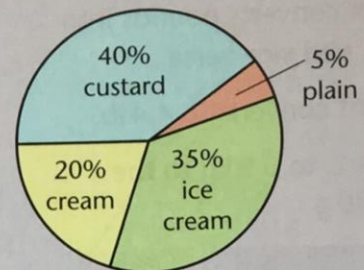

  a) How many cars carried each number of people?

  b) Construct the pie chart.

4 This table shows the 80 main courses served in an Italian restaurant.

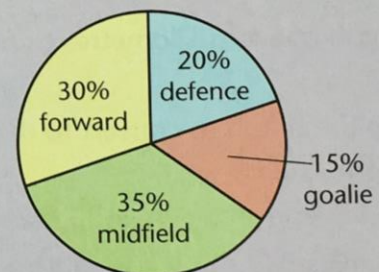| Course	Servings
Fish	10
Pasta	20
Pizza	40
Meat	10

  a) Find the proportion of the 80 courses served represented by each type of course.

  b) Work out the angle at the centre of each sector of a pie chart showing these proportions.

  c) Construct the pie chart.

C

1 The pie chart shows what 160 people chose to be served with their apple pie.

  a) How many people chose each accompaniment?

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

2 The 40 members of a hockey club were asked to choose their best position. These are the results.

  a) How many members chose each position?

  b) Construct the pie chart.

3 This table shows the 3000 books in a library.

Categories	Books
Fiction	1350
Non-fiction	900
Children's	600
Reference	150

  a) Find the proportion of the total number of books represented by each category.

  b) Work out the angle at the centre of each sector of a pie chart showing the proportions.

  c) Construct the pie chart.