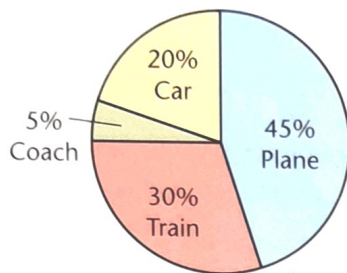


TARGET To interpret and construct pie charts.

Example 1

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



How many people used each form of transport?

- Car 100 people $(500 \div 10) \times 2$
- Coach 25 people $(500 \div 10) \div 2$
- Train 150 people $(500 \div 10) \times 3$
- Plane 225 people $(500 \div 100) \times 45$

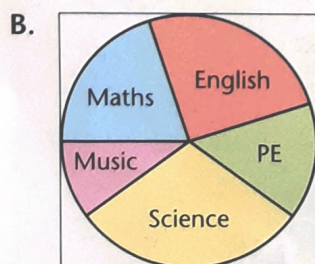
Example 2

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

Maths	60 mins
English	75 mins.
P.E.	45 mins.
Science	90 mins.
Music	30 mins.
Total	300 mins.

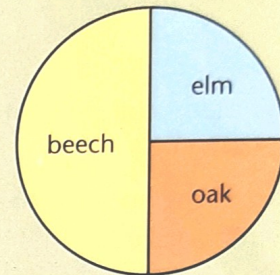
- A.** Find the angle at the centre of each sector.
- B.** Construct the pie chart.

- A.** Maths $\frac{60}{300} \frac{1}{5}$ $360^\circ \div 5 = 72^\circ$
- English $\frac{75}{300} \frac{1}{4}$ $360^\circ \div 4 = 90^\circ$
- P.E. $\frac{45}{300} \frac{3}{20}$ $(360^\circ \div 20) \times 3 = 54^\circ$
- Science $\frac{90}{300} \frac{3}{10}$ $(360^\circ \div 10) \times 3 = 108^\circ$
- Music $\frac{30}{300} \frac{1}{10}$ $360^\circ \div 10 = 36^\circ$



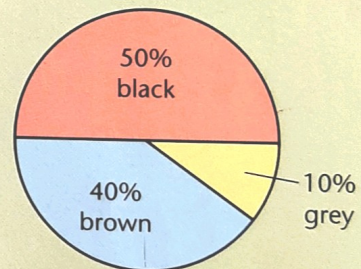
A

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



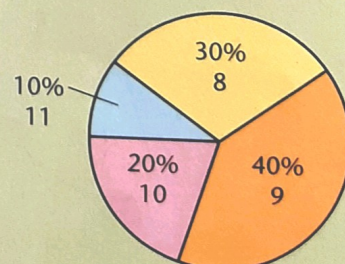
- a) How many of each type of tree were planted?
- b) Give the angle at the centre of the brown sector.

- 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.

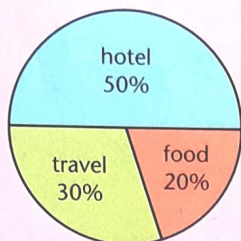
- 3** The ages of 30 children at a party.



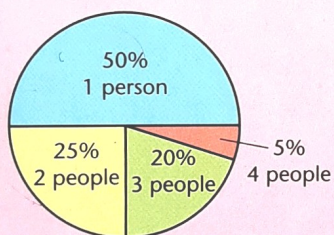
- a) How many children of each age were at the party?
- b) Give the angle at the centre of the pink sector.

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.



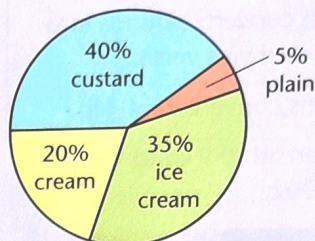
- a) How many cars carried each number of people?
 - b) Construct the pie chart.
- 4 This table shows the 80 main courses served in an Italian restaurant.

Course	Servings
Fish	10
Pasta	20
Pizza	40
Meat	10

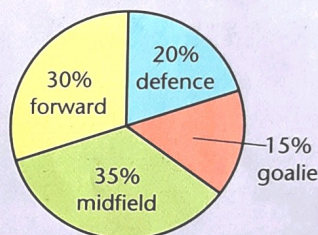
- a) Find the proportion of the 80 courses served represented by each type of course.
- b) Work out the angle at the centre of each sector of a pie chart showing these proportions.
- c) Construct the pie chart.

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.