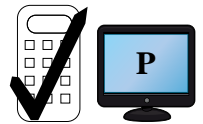# Two-Way Tables

1). Keith does a survey at his school.
All the pupils take part in the survey.
He draws this two-way table.

	Right handed	Left handed
Girls	188	32
Boys	203	37

   a). What two questions do you think he has asked?
   b). How many pupils are there in the school?
   c). How many pupils in the school are left handed?
   d). How many boys are in the school?
   e). What percentage of the school is right handed?
   f). What percentage of the girls is left handed?

2). A survey is conducted in a town centre.
The two-way table shows the results.

	Musical Preference	
	Pop	Classical
30 and over	64	48
Under 30	84	14

   a). What two questions do you think have been asked?
   b). How many people took part in the survey?
   c). How many people in the survey where 30 and over?
   d). How many people in the survey preferred classical music?
   e). What is the ratio of people who prefer pop to classical in
      i). the 30 and over range,   ii). the under 30 range,   iii). in the survey?
   f). What percentage of the Under 30s surveyed prefers pop?

3). Pupils in a biology lesson classified the year group by hair colour and eye colour.
The results were put in the table shown.

	Blue eyes	Not blue eyes
Fair hair	32	3
Not fair hair	67	93

   a). How many people were classified in total?
   b). How many people have fair hair?
   c). If some one from the year group is chosen at random what is the probability they **do not** have fair hair?
   d). What percentage of the year group has
      i). fair hair **and** blue eyes,   ii). Not fair hair and blue eyes?
   e). A person with fair hair is chosen at random.
      What is the probability that they **do not** have blue eyes?
   f). What is the ratio of blue eyes to not blue eyes for the year group?

4). A shoe shop records sales for the week.
It divides the shoes into the 3 styles, fashion shoes, traditional shoes and trainers.

	Style		
	Fashion	Traditional	Trainers
Children's	61	14	86
Adult's	19	54	26

   a). How may sales were made in the week for the given table?
   b). How many fashion sales were made in the week?
   c). What fraction of total sales were
      i). traditional shoes,   ii). trainers?
   d). What fraction of sales to children were traditional style shoes?
   e). What percentage of sales to adults were traditional style shoes?
   f). What is the ratio children to adults for sales of trainers?