

## S135 Two-way tables

**Q1.**

148 students each choose to study Geography or to study History.

72 of the students choose History.

34 boys choose Geography.

28 girls choose History.

Use this information to complete the two-way table.

	Geography	History	Total
Boys			
Girls			
Total			

**(Total for question = 3 marks)**

**Q2.**

Some students went on an activity course.

Each student had to choose one activity from art or drama or music.

There were 41 students.

15 of the students chose music.

30 of the students were girls.

8 of the girls chose art.

No boys chose art.

Equal numbers of boys and girls chose drama.

Complete the two-way table.

	art	drama	music	total
girls				
boys				
total				41

**(Total for question = 3 marks)**

**Q3.**

The two-way table shows some information about the numbers of ice creams sold in a shop.

	Friday	Saturday	Sunday	Total
Morning		34		
Afternoon	38		63	153
Total	65			265

Complete the two-way table.

**(Total for question = 3 marks)**

**Q4.**

The incomplete two-way table shows information about the nationality of 80 people staying in either a tent or a caravan at a campsite.

	French	British	Dutch	Total
Tent	8		25	44
Caravan		17		
Total			32	80

Complete the two-way table.

**(Total for question = 3 marks)**

**Q5.**

There are 72 guests staying in a hotel.  
They are French or German or Spanish.

The two-way table shows some information about the guests.

	French	German	Spanish	Total
Female	17		14	40
Male		13		32
Total	29		21	72

(a) Complete the two-way table.

(2)

One of these guests is picked at random.

(b) Write down the probability that the guest is female.

.....  
(1)

One of the male guests is picked at random.

(c) Write down the probability that this male guest is German.

.....  
(1)

**(Total for Question is 4 marks)**

**Q6.**

100 students each chose one activity.  
Each student chose bowling or karting or ice skating.

The two-way table shows some information about the activities the students chose.

	<b>Bowling</b>	<b>Karting</b>	<b>Ice skating</b>	<b>Total</b>
<b>Boys</b>		13		47
<b>Girls</b>			34	
<b>Total</b>	26	20		100

(a) Complete the two-way table.

(3)

One of the boys is chosen at random.

(b) What is the probability that this boy chose karting?

.....  
(2)

**(Total for Question is 5 marks)**

**Q7.**

There are 130 adults at a language school.

Each adult studies one of French or Spanish or German.

96 of the adults are women.

12 of the women study French.

73 of the adults study Spanish.

55 of the women study Spanish.

9 of the men study German.

How many of the adults study French?

.....  
**(Total for Question is 4 marks)**

**Q8.**

100 adults were asked how they keep fit.

Each adult goes to the gym or runs or cycles.

45 of these adults are female.

30 of the 52 adults who go to the gym are female.

35 adults run.

9 males cycle.

How many females run?

**(Total for question = 3 marks)**

**Q9.**

There are 40 students in a class.

Each student walks to school or cycles to school or gets the bus to school.

There are 22 girls in the class.

9 of the girls walk to school.

7 of the boys cycle to school.

6 of the 10 students who get the bus to school are boys.

Find the number of these students who walk to school.

**(Total for question = 4 marks)**

**Q10.**

A teacher asked 30 students if they had a school lunch or a packed lunch or if they went home for lunch.

17 of the students were boys.

4 of the boys had a packed lunch.

7 girls had a school lunch.

3 of the 5 students who went home were boys.

Work out the number of students who had a packed lunch.

**(Total for Question is 4 marks)**

**Q11.**

There are 40 people at a meeting.

Each person travelled to the meeting either by car or by train.

13 of the people are male.

10 females travelled by train.

8 males travelled by car.

Work out the total number of people who travelled by car.

**(Total for Question is 3 marks)**



**Q12.**

Felicity asked 100 students how they came to school one day.  
Each student walked or came by bicycle or came by car.

49 of the 100 students are girls.

10 of the girls came by car.

16 boys walked.

21 of the 41 students who came by bicycle are boys.

Work out the total number of students who walked to school.

**(Total for Question is 4 marks)**

**Q13.**

On an activity day students play one sport.

They play football or hockey or tennis.

120 students are on the activity day.

30 of the students are boys.

12 of the boys and 26 of the girls play hockey.

45 of the students play football.

35 of the 45 students who play football are girls.

Work out the number of girls who play tennis.

**(Total for Question is 4 marks)**

**Q14.**

Milk is sold in  $\frac{1}{2}$  pint bottles, in 1 pint bottles and in 2 pint bottles.

One weekend a shop sold 100 bottles of milk.

46 of the bottles were sold on Sunday.

15 of the bottles sold on Sunday were 2 pint bottles.

31 of the bottles sold on Saturday were  $\frac{1}{2}$  pint bottles.

22 of the bottles sold were 2 pint bottles.

30 of the bottles sold were 1 pint bottles.

How many 1 pint bottles were sold on Sunday?

**(Total for question = 4 marks)**