



Two-Way Tables Exam Practice

Q1. 110 students were asked about their favourite sport:

	Tennis	Football	Cricket	Total
Male	4	16	11	31
Female	36	29	14	79
Total	40	45	25	110

Complete the table above.

Answer: _____
(3 marks)



Q2. 250 school pupils were asked about their favourite subject:

	English	Maths	Science	Total
Year 7	56	11	34	101
Year 8	31	104	14	149
Total	87	115	48	250

Complete the table above.

Answer: _____
(3 marks)



Q3. Some students were asked how they get to school each day:

20 boys cycled.

53 girls did not take the bus.

The total of students who took the bus was 41.

45 girls walked, whilst 10 boys walked.

The number of girls interviewed was 78.

	Bus	Cycle	Walk	Total
Boys	16	20	10	46
Girls	25	8	45	78
Total	41	28	55	124

a) Use the information to complete the table above.

Answer: _____
(3 marks)

b) A student is chosen at random from the survey. What is the probability that they do not cycle to school?

$$\begin{aligned} & \frac{41 + 55}{124} \\ &= \frac{96}{124} \\ &= \frac{24}{31} \end{aligned}$$

Answer: $\frac{24}{31}$ _____
(2 marks)



Q4. The number of pets in two villages, Ardwick and Benton is surveyed:

	Ardwick	Benton	Total
Dogs	2	6	8
Cats	13	21	34
Rabbits	9	8	17
Total	24	35	59

60% of the pets living in Benton were cats.

There were a total of 17 rabbits.

The total of pets in Benton was 35.

In Ardwick, there were 2 dogs, and 9 rabbits

There were twice as many cats as rabbits in total.

Complete the table using the information above.

Answer: _____

(4 marks)



Q5. At college, the canteen provides lunch over 2 sittings.

100 students went to the canteen, and each student had lasagne, curry or a burger. 54 of these students went to the first sitting. Over the lunch period a total of 41 students had lasagne. 13 of the 27 students that had a burger went to the second sitting. 10 students choose to have curry at the first sitting.

How many students went to the second sitting and ate curry?

	L	C	B	Totals
1st	30	10	14	54
2nd	11	22	13	46
Totals	41	32	27	100

22 had curry at the 2nd sitting.

Answer: 22

(4 marks)



Q6. Churton school and Denton school attended a university open day. 15% of the attendees were teachers, and the rest were students. 45% of the attendees were students from Denton school. The ratio of teachers to students from Denton school was 2 : 7.

One of the attendees is selected at random. Find the probability that they are a teacher from Churton school.

	C	D	Totals (%)
Teachers	5	10	15
Students	50	35	85
Totals (%)	55	45	100

$$\begin{array}{c} \text{45} \\ \text{T} \quad \text{S} \\ \hline \text{2} : \text{7} \end{array}$$

$$\Rightarrow 45 \div 9 = 5 \text{ people per part}$$

$$\Rightarrow 2 \times 5 = 10\% \text{ are teachers}$$

$$\Rightarrow 7 \times 5 = 35\% \text{ are students}$$

$$P(\text{teacher from Churton}) = \frac{5}{100} \quad (5\%)$$

Answer: 5%

(4 marks)