

Two-Way Tables

1. In a survey on the popularity of visiting France and Holland, a sample of 100 Danish adults were asked for their holiday destinations last summer. In June 6 people went to France, 18 went to Holland and 5 went elsewhere. In July 10 people went to France, 19 went to Holland and 2 went elsewhere. In August 15 people went to France, 15 people went to Holland and 10 went elsewhere.

a) Complete the two-way table below for the data above.

	FRANCE	HOLLAND	ELSEWHERE	TOTAL
JUNE				
JULY				
AUGUST				
TOTAL				

b) How many people went on holiday in June?

c) What percentage of those surveyed holidayed in Holland?

d) A person is selected at random. What is the probability they went on holiday in August to France?

2. Data on the number of people who passed or failed their driving test at the first time is shown below.

	MALE	FEMALE	TOTAL
PASSED		14	
FAILED	8		
TOTAL	25		45

a) Complete the two-way table above.

b) How many people failed their test on their first attempt?

c) One driver is selected at random. What is the probability they are a female who failed her test?

d) Do a greater proportion of males or females pass their test at the first attempt? Explain.

3. Data on the performance of two rival train companies is shown below.

	On Time	Early	Late	TOTAL
Virgin Trains			29	250
South West Trains	174	6		
TOTAL	384		49	

a) Complete the two-way table above.

b) What percentage of each train company's trains ran on time?

c) Did a higher percentage of Virgin trains arrive late? Justify your answer.

d) Given this data, in the next 5000 arrivals of South West Trains, how many would you expect to arrive early?