TWO WAY TABLES

Pearson Edexcel - Tuesday 19 May 2020 - Paper 1 (Non-Calculator) Foundation Tier

1.

14 Ishmael asked 30 students at college to tell him the sport they each like the best from cricket or tennis or swimming.

11 of the 20 female students said swimming.
2 of the male students said tennis.
5 students said cricket.

The number of male students who said cricket was the same as the number of male students who said swimming.

Complete the two-way table.

	Cricket	Tennis	Swimming	Total
Male students				
Female students				20
Total				30

(Total for Question 14 is 3 marks)

Pearson Edexcel - Tuesday 21 May 2019 - Paper 1 (Non-Calculator) Foundation Tier

2.

21 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.

Pearson Edexcel - Thursday 2 November 2017 - Paper 1 (Non-Calculator) Foundation Tier

3.

12 Emma has 45 rabbits.

30 of the rabbits are male.
8 of the female rabbits have short hair.
12 of the rabbits with long hair are male.

(a) Use the information to complete the two-way table.

	Male	Female	Total
Long hair			
Short hair			
Total			

(3)

One of Emma's rabbits is chosen at random.

(b) Write down the probability that this rabbit is a female with short hair.

(1)

(Total for Question 12 is 4 marks)

4.

11 Complete the two-way table.

	blue eyes	brown eyes	green eyes	total
boys	5		4	12
girls		7		
total			9	30

(Total for Question 11 is 3 marks)

5.

23 A and B are two companies.

The table shows some information about the sales of each company and the number of workers for each company in 2004 and in 2014

	Company A		Company B	
	Sales (£ millions)	Number of workers	Sales (£ millions)	Number of workers
2004	320	2960	48	605
2014	388	3200	57	640

(a) Work out the percentage increase in sales from 2004 to 2014 for Company A.

.... %

(2)

(b) Which company had the most sales per worker in 2014, Company A or Company B?
You must show how you get your answer.

(3)

(Total for Question 23 is 5 marks)

6.

16 Abi, Ben and Carl each drop a number of identical drawing pins, and count how many land with the pin upwards. The table shows some of their results.

	Number of pins dropped	Number landing 'pin up'
Abi	10	4
Ben	30	9
Carl	100	35

(a) Abi says

> As a drawing pin can only land with its pin up or with its pin down, the probability of a drawing pin landing 'pin up' is $\frac{1}{2}$.

Criticise her statement.

....

.... [1]

(b) Carl's results give the best estimate of the probability of a drawing pin landing 'pin up'. Explain why.

....

.... [1]

(c) Two pins are dropped.

Estimate the probability that both pins land 'pin up'.

(c) .... [2]

7.

16 The table shows information about how 150 students travel to school.

	Walk	Bus	Car	
Girls	22	33	17	Total = 72
Boys	24	41	13	Total = 78

16 (a) What fraction of the **girls** walk to school?

Give your answer in its simplest form.

[2 marks]

_____

_____

Answer _____

16 (b) One of the **boys** is chosen at random.

What is the probability that the boy travels to school by bus?

[1 mark]

_____

_____

Answer _____

16 (c)   What percentage of the 150 **students** travel to school by car?

[2 marks]

_____

_____

_____

Answer _____ %