Q1 June 2017

7 The probability that a new fridge has a fault is 0.015

What is the probability that a new fridge does **not** have a fault?

.....

(Total for Question 7 is 1 mark)

Q2 June 2017

17 The table shows the probabilities that a biased dice will land on 2, on 3, on 4, on 5 and on 6

Number on dice	**1**	**2**	**3**	**4**	**5**	**6**
Probability		0.17	0.18	0.09	0.15	0.1

Neymar rolls the biased dice 200 times.

Work out an estimate for the total number of times the dice will land on 1 or on 3

.....

(Total for Question 17 is 3 marks)

Q3 June 2018

7 Mohsin, Yusuf and Luke are going to play a game.
At the end of the game, one of them will be in First place, one of them will be in Second place and one of them will be in Third place.

Use the table below to list all the possible outcomes of the game.

First place	Second place	Third place

(Total for Question 7 is 2 marks)

Q4 June 2018

13 A scout group has a raffle to raise money for charity.
There is 1 prize to be won in the raffle.

Laura buys 12 raffle tickets.
A total of 350 raffle tickets are sold.

Find the probability that Laura does **not** win the prize.

.....

(Total for Question 13 is 2 marks)

Q5 June 2019

16 Four biased coins, A, B, C and D are thrown.

The probability that each coin will land on Heads is shown in the table.

Coin	Probability
A	0.33
B	0.033
C	$\frac{1}{3}$
D	30%

(a) (i) Which coin is least likely to land on Heads?

.....

(1)

(ii) Which coin is most likely to land on Heads?

.....

(1)

Julie says,

> "The probability that coin C will land on Heads is the same as the probability that coin C will land on Tails."

(b) Is she correct?
Give a reason for your answer.

.....

.....

.....

(1)

Coin B is going to be thrown 4000 times.

(c) Work out an estimate for the number of times coin B will land on Heads.

.....

(2)

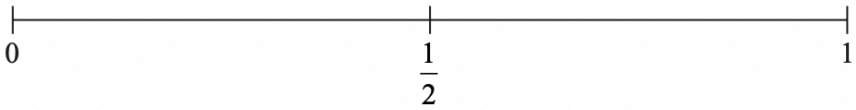
(Total for Question 16 is 5 marks)

Q6 June 2023

6 Shari has a fair ordinary dice.

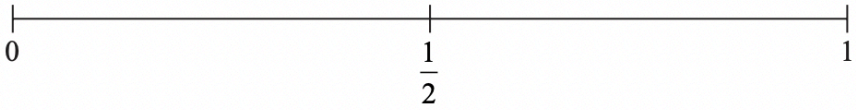
She rolls the dice once.

(a) On the probability scale, mark with a cross (×) the probability that Shari gets the number 7



(1)

(b) On the probability scale, mark with a cross (×) the probability that Shari gets an even number.

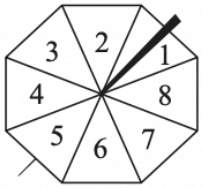


(1)

(Total for Question 6 is 2 marks)

Q7 June 2023

15 Here is a fair ordinary dice and a fair 8-sided spinner.



Charlie throws the dice once and spins the spinner once.

Is Charlie more likely to get

a number less than 3 on the dice
or a number greater than 5 on the spinner?

You must show all your working.

(Total for Question 15 is 3 marks)

Q8 June 2024

10 Anita throws a coin 3 times.
Each time the coin can land on heads (H) or tails (T).

List all the possible outcomes.

.....

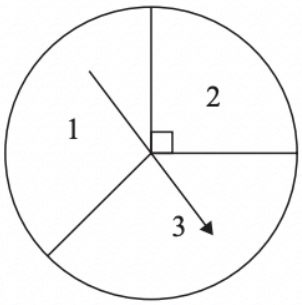
.....

.....

(Total for Question 10 is 2 marks)

Q9 June 2024

11 Majid has a spinner.



Majid is going to spin the arrow.
The arrow can land on 1 or on 2 or on 3

Majid says,

"The probability that the arrow will land on 2 is $\frac{1}{3}$ because the spinner has three sections."

Is Majid correct?
You must give a reason for your answer.

.....

.....

.....

(Total for Question 11 is 1 mark)

Q10 June 2024

23 There are only red discs, blue discs and yellow discs in a bag.
There are 24 yellow discs in the bag.

Mel is going to take at random a disc from the bag.

The probability that the disc will be yellow is 0.16

the number of red discs : the number of blue discs = 5 : 4

Work out the number of red discs in the bag.

.....

(Total for Question 23 is 4 marks)

Q11 Nov 2017

19 There are only blue cubes, yellow cubes and green cubes in a bag.

There are

twice as many blue cubes as yellow cubes
and four times as many green cubes as blue cubes.

Hannah takes at random a cube from the bag.

Work out the probability that Hannah takes a yellow cube.

.....

(Total for Question 19 is 3 marks)

Q12 Nov 2018

12 There are 49 counters in a bag.

20 of the counters are red.
The rest of the counters are blue.

One of the counters is taken at random.

Find the probability that the counter is blue.

.....

(Total for Question 12 is 2 marks)

Q13 Nov 2018

14 Victoria throws an ordinary fair 6-sided dice once.

She says,

"The probability of getting a 3 is half the probability of getting a 6"

(a) Is Victoria correct?
You must explain your answer.

.....

.....

(1)

Andy throws the dice twice.
He says,

"The probability of getting a 6 on both throws is $\frac{2}{6}$"

(b) Is Andy correct?
You must explain your answer.

.....

.....

(1)

Indre throws the dice once.
She also throws a coin to get Heads or Tails.

(c) List all the possible outcomes she can get.

.....

.....

.....

(2)

(Total for Question 14 is 4 marks)

Q14 Nov 2023

9 Harris is buying a shirt and a tie.
He has a choice of three colours of shirt and a choice of three styles of tie.

Shirt	Tie
White (W)	Plain (P)
Blue (B)	Striped (S)
Grey (G)	Checked (C)

Harris is going to choose one shirt and one tie.

List all the possible combinations Harris can choose.

.....

.....

.....

.....

(Total for Question 9 is 2 marks)

Q15 Nov 2024

16 Aisha has two boxes of sweets, box **A** and box **B**.

In box **A**, there are only 10 red sweets and 30 green sweets.
In box **B**, there are only 7 red sweets and 18 green sweets.

Aisha is going to take at random a sweet from box **A** and a sweet from box **B**.

Which box gives Aisha the greater probability of taking a red sweet, box **A** or box **B**?
You must show how you get your answer.

(Total for Question 16 is 3 marks)