Name:

Date:

Writing Probabilities

GCSE

Edexcel

Mathematics

Grade (9-1)

Mark	Score (%)
55	

Materials

For this paper you must have:

- Ruler
- Pencil, Rubber, Protractor and Compass
- Scientific calculator, which you are expected to use when appropriate

Instructions

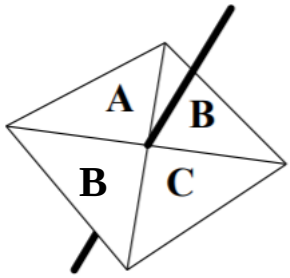
- Answer all questions
- Answer questions in the space provided
- All working must be shown
- Do all rough work in this book. Cross out any rough work you don't want to be marked

Information

- The marks for the questions are shown in brackets

Leave blank

1 Jacob spins the spinner shown.

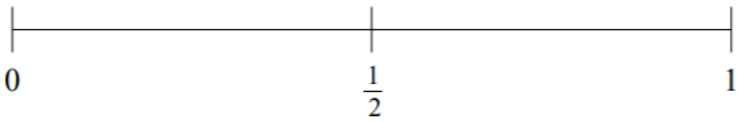


(a) What is the probability that the spinner lands on C?

.....

(1)

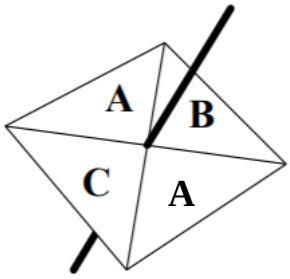
(b) On the scale below, mark the probability that the spinner lands on B.



(1)

(Total for question 1 is 2 marks)

2 Hannah spins the spinner shown.

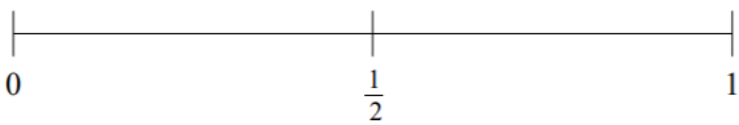


(a) What is the probability that the spinner lands on A?

.....

(1)

(b) On the scale below, mark the probability that the spinner lands on C.

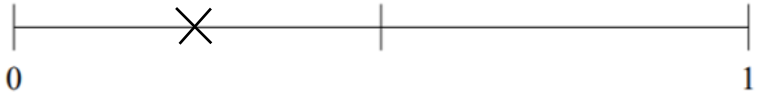


(1)

(Total for question 2 is 2 marks)

Leave blank

3 The probability of an event is marked with a cross (×) on the probability scale.

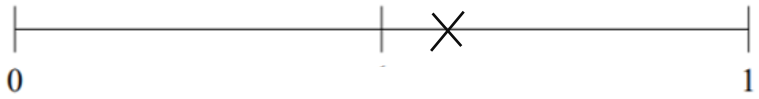


Write down an estimate for the probability of the event.

.....

(Total for question 3 is 2 marks)

4 The probability of an event is marked with a cross (×) on the probability scale.



Write down an estimate for the probability of the event.

.....

(Total for question 4 is 2 marks)

5 Here is a list of 6 numbers.

1 2 4 5 6 9

One of the numbers is chosen at random.
Write down the probability that this number is 5.

.....

(Total for question 5 is 2 marks)

6 Here is a list of 8 numbers.

1 2 3 4 5 6 7 9

One of the numbers is chosen at random.
Write down the probability that this number is even.

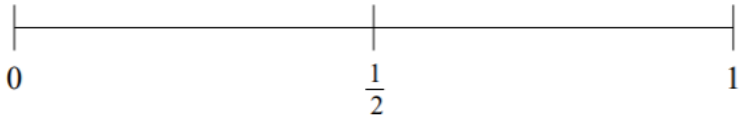
.....

(Total for question 6 is 2 marks)

Leave blank

7 A fair 6-sided dice is thrown once.

(a) On the probability scale mark with a cross (×) the probability that the dice lands on an odd number.



(2)

(b) Write down the probability that the dice lands on a prime number.

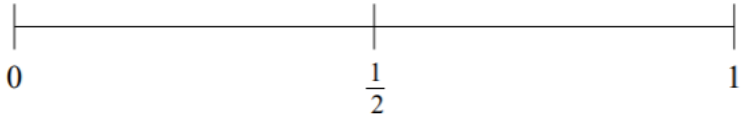
.....

(1)

(Total for question 7 is 3 marks)

8 A fair 6-sided dice is thrown once.

(a) On the probability scale mark with a cross (×) the probability that the dice lands on 8.



(2)

(b) Write down the probability that the dice lands on a number greater than 2.

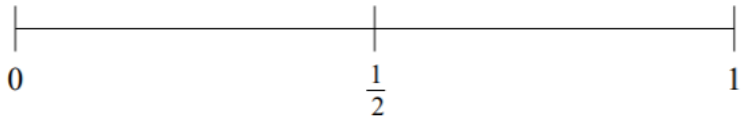
.....

(1)

(Total for question 8 is 3 marks)

9 A fair 6-sided dice is thrown once.

(a) On the probability scale mark with a cross (×) the probability that the dice lands on an even number.



(2)

(b) Write down the probability that the dice lands on a factor of 6.

.....

(2)

(Total for question 9 is 4 marks)

Leave blank

10 The probability of South Africa winning Cricket World Cup match is 0.2

Work out the probability that South Africa does not win the Cricket World Cup.

.....

(Total for question 10 is 2 marks)

11 The probability of Chelsea winning a tennis tournament is 0.4

Work out the probability that Chelsea does not win a tennis tournament.

.....

(Total for question 11 is 2 marks)

12 There are 48 sweets in a bag.

20 of the sweets are blue.
The rest of the sweets are white.

One of the sweets is taken at random.

Find the probability that the sweet is white

.....

(Total for question 12 is 3 marks)

Leave blank

13 There are 35 fruits in a bag.

3 of the fruits are oranges.
7 of the fruits are bananas
The rest of the fruits are apples.

One of the fruits is taken at random.

Find the probability that the fruit is an apple.

.....

(Total for question 13 is 3 marks)

14 There are 47 counters in a bag.

13 of the counters are blue.
The rest of the counters are yellow.

One of the counters is taken at random.
Find the probability that the counter is yellow.

.....

(Total for question 14 is 3 marks)

Leave blank

15 A draw is being held to win a free pass at an amusement park.

Laiba buys 45 tickets.
A total of 586 tickets are in the draw.

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

.....

(Total for question 15 is 3 marks)

16 There are some sweets in a bag.

The table shows the number of sweets of each colour.

Colour	Yellow	Green	Red	Blue
Numbers	12	8	7	3

A sweet is taken at random from the bag.

(a) Write down the probability that the sweet is red.

.....

(1)

(b) Write down the probability that the sweet is not blue.

.....

(2)

(Total for question 16 is 3 marks)

Leave blank

17 There are some marbles in a bag.

The table shows the number of sweets of each colour.

Colour	Yellow	Green	Red	White
Numbers	8	12	2	3

A marble is taken at random from the bag.

(b) Write down the probability that the marble is green.

.....

(1)

(b) Write down the probability that the marble is not white.

.....

(1)

(Total for question 17 is 2 marks)

18 In a box of chocolates there are

- 13 milk chocolates
- 4 dark chocolates
- 8 white chocolates

Hailey takes one of the chocolates at random.

Write down the probability that Hailey takes a dark chocolate.

.....

(Total for question 18 is 4 marks)

Leave blank

19 In a box of sweets there are

- 11 chocolates
- 4 brownies
- 17 toffees

Liz takes one of the sweets at random.

Write down the probability that Liz takes a brownie.

.....

(Total for question 19 is 4 marks)

20 There are red, blue, yellow and green counters in a bag.

A counter is picked at random from the bag.

The table shows the probabilities of the counter being red, blue or yellow.

Colour	Yellow	Green	Red	Blue
Probability	0.1		0.4	0.3

Complete the table.

(Total for question 20 is 4 marks)