

4.1 Basic Probability

Question Paper

Course	CIE IGCSE Maths
Section	4. Probability & Statistics
Topic	4.1 Basic Probability
Difficulty	Easy

Time allowed: 20
Score: /9
Percentage: /100

Question 1



The diagram shows six discs.
Each disc has a colour and a number.

One disc is picked at random.

Write down the probability that

i)
the disc has the number 4,

[1]

ii)
the disc is red and has the number 3,

[1]

iii)
the disc is blue and has the number 4.

[1]

[3 marks]

Question 2

The test scores of 14 students are shown below.

21 21 23 26 25 21 22 20 21 23 23 27 24 21

A student is chosen at random.

Find the probability that this student has a test score of more than 24.

[1]

[1 mark]

Question 3

20 students each record the mass, p grams, of their pencil case.

The table below shows the results.

Mass (p grams)	$0 < p \leq 50$	$50 < p \leq 100$	$100 < p \leq 125$	$125 < p \leq 150$	$150 < p \leq 200$
Frequency	2	5	4	6	3

A student is chosen at random.

Find the probability that this student has a pencil case with a mass greater than 150 g.

[1]

[1 mark]

Question 4

The time taken for each of 120 students to complete a cooking challenge is shown in the table.

Time (t minutes)	$20 < t \leq 25$	$25 < t \leq 30$	$30 < t \leq 35$	$35 < t \leq 40$	$40 < t \leq 45$
Frequency	44	32	28	12	4

A student is chosen at random.

Find the probability that this student takes more than 40 minutes.

[1]

[1 mark]

Question 5

The heights, metres, of the 120 boys in an athletics club are recorded.

The table shows information about the heights of the boys.

Height (h metres)	$1.3 < h \leq 1.4$	$1.4 < h \leq 1.5$	$1.5 < h \leq 1.6$	$1.6 < h \leq 1.7$	$1.7 < h \leq 1.8$	$1.8 < h \leq 1.9$
Frequency	7	18	30	24	27	14

One boy is chosen at random from the club.

Find the probability that this boy has a height greater than 1.8 m.

[1]

[1 mark]

Question 6

The frequency table shows information about the time, m minutes, that each of 160 people spend in a library.

Time (m minutes)	$0 < m \leq 10$	$10 < m \leq 40$	$40 < m \leq 60$	$60 < m \leq 90$	$90 < m \leq 100$	$100 < m \leq 120$
Frequency	3	39	43	55	11	9

Find the probability that one of these people, chosen at random, spends more than 100 minutes in the library.

[1]

[1 mark]

Question 7

Sushila, has a bag which contains 10 red balls and 8 blue balls.

Sushila takes one ball at random from her bag.

Find the probability that she takes a red ball.

[1]

[1 mark]