

1. The sides of a dice are labelled 1, 2, 3, 4, 5 and 6.

The dice is biased.

The probability that the dice will land on each of the numbers 1, 2, 3, 4, 5 or 6 is given in the table.

Number	1	2	3	4	5	6
Probability	0.13	0.2	0.11	0.18	0.1	0.28

Shaheen is going to roll the dice 200 times.

Work out an estimate for the number of times the dice will land on an odd number.

1.

2. The sides of a dice are labelled 1, 2, 3, 4, 5 and 6.

The dice is biased.

The probability that the dice will land on each of the numbers 1, 2, 3, 4, 5 or 6 is given in the table.

Number	1	2	3	4	5	6
Probability	0.13	0.2	0.11	0.18	0.1	0.28

Farah is going to roll the dice 200 times.

Work out an estimate for the number of times the dice will land on an even number.

2.

3. The sides of a 4-sided spinner are labelled 1, 2, 3 and 4.

The spinner is biased.

The probability that the spinner will land on each of the numbers 1, 3 or 4 is given in the table.

Number	1	2	3	4
Probability	0.41		0.1	0.41

(a) Work out the probability that the spinner will land on the number 2.

(a)

Geeta is going to spin the spinner 200 times.

(b) Work out an estimate for the number of times the spinner will land on 4.

(b)

4. The probability that a biased dice will land on a six is 0.35

Francesca is going to roll the dice 400 times.

Work out an estimate of the number of times the dice will land on a six.

4.

Q1: 68

FYI: $0.13 + 0.11 + 0.1 = 0.66 \rightarrow M1$, $0.34 \times 200 \rightarrow M1$

Q2: 132

FYI: $0.2 + 0.18 + 0.28 = 0.66 \rightarrow M1$, $0.66 \times 200 \rightarrow M1$

Q3: 16

FYI: $200 \times 0.08 \rightarrow M1$

Q4 (a) 0.08

FYI: $1 - (0.41 + 0.1 + 0.41) \rightarrow M1$

Q4 (b) 140

FYI: $400 \times 0.35 \rightarrow M1$