

Name: _____ Date: _____

- The probability that a student passes a driving theory test is 0.8.

200 students take the test.

Work out an estimate for the number of students who will pass.
- The probability that a light bulb lasts more than 1 year is 0.75.

A shop sells 120 light bulbs.

Work out an estimate for the number of bulbs that will last more than 1 year.
- The probability that a train arrives on time is 0.92.

In one week, 85 trains arrive.

Work out an estimate for the number of trains that will arrive on time.
- The probability that a phone battery lasts all day is 0.85.

A company sells 60 phones.

Work out an estimate for the number of phones that will not last all day.
- The probability that a packet of biscuits contains a broken biscuit is 0.1.

A factory produces 300 packets.

Work out an estimate for the number of packets with no broken biscuits.
- The probability that a customer leaves a review after making a purchase is 0.35.

A company has 240 customers.

Work out an estimate for the number of customers who do not leave a review.

- A bag contains counters that are blue, red, green and yellow.

The probabilities of picking each colour are shown in the table:

Colour	Blue	Red	Green	Yellow
Probability	0.25	0.4	0.15	0.20

- Work out the probability of picking a blue counter.
0.25 (2)
- 200 counters are taken from the bag.
Work out an estimate for the number of red counters.
80 (2)

- A bag contains counters that are blue, red, green and yellow.

The probabilities of picking each colour are shown in the table:

Colour	Blue	Red	Green	Yellow
Probability	0.18	0.37	0.29	0.16

Work out the probability of picking a blue or green counter.
0.47 (4)

- A bag contains counters that are blue, red, green and yellow.

The probabilities of picking each colour are shown in the table:

Colour	Blue	Red	Green	Yellow
Probability	$\frac{1}{5}$	$\frac{3}{10}$	0.27	0.16

- Work out the probability of picking a green counter.
0.16 (2)
- 500 counters are taken from the bag.
Work out an estimate for the number of blue counters.
100 (2)

- A spinner has four sections: blue, red, green and yellow.

The probabilities of landing on each colour are shown in the table:

Colour	Blue	Red	Green	Yellow
Probability	0.23	0.3	0.23	0.24

The probability that the spinner lands on a blue is the same as the probability of the spinner landing green.
Complete the table.

- A spinner has four sections: blue, red, green and yellow.

The probabilities of landing on each colour are shown below:

Colour	Blue	Red	Green	Yellow
Probability	0.2	0.35	0.25	0.20

- Complete the table.
..... (2)
- The spinner is spun 500 times.
Work out an estimate for the number of times it will land on red or green.
300 (2)

- A box contains pens that are blue, red, green and yellow.

The probabilities of picking each colour are shown in the table:

Colour	Blue	Red	Green	Yellow
Probability	0.3	0.25	0.1	0.35

There are 7 yellow pens in the box.

The probability of landing on red is twice the probability of landing on yellow.

Work out the total number of pens in the box.
20 (4)

- A box contains counters that are blue, red, green and yellow.

The probabilities of picking each colour are shown in the table:

Colour	Blue	Red	Green	Yellow
Probability	0.35	0.2	0.15	0.30

There are 18 green counters in the box.

Work out the number of red counters in the box.
24 (4)

- A bag contains pens that are blue, red, green and yellow.

The probabilities of picking each colour are shown in the table:

Colour	Blue	Red	Green	Yellow
Probability	0.4	0.15	0.25	0.20

There are 12 yellow pens in the bag.

Work out the number of red pens in the bag.
9 (4)