



# EXAM PAPERS PRACTICE

GCSE OCR Math J560  
Basic Probability

Question Paper

*"We will help you to  
achieve A Star "*



**Question 1**

The probability that a biased dice will land on a five is 0.3

Megan is going to roll the dice 400 times.

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

**[2 marks]**



**Question 2**

Rhiana plays a game.

The probability that she will lose the game is 0.32

The probability that she will draw the game is 0.05

Rhiana is going to play the game 200 times.

Work out an estimate for the number of times Rhiana will win the game.

**[3 marks]**



**Question 3**

Jane has a packet of seeds.

The probability that a seed will grow is 0.75

(a) What is the probability that a seed will **not** grow?

[1 mark]

**Question 4**

Jane plants 200 of these seeds.

(b) Estimate the number of the seeds that will grow.

[2 marks]



**Question 5**

Uditi has a bag of chocolate sweets.

There are 30 sweets in the bag.

This table shows the types of sweets in the bag.

	Strawberry	Caramel	Nut
Dark chocolate	3	1	6
Milk chocolate	4	5	2
White chocolate	1	4	4

Uditi takes at random a sweet from the bag.

(a) Write down the probability that the sweet is a dark chocolate caramel.

[1 mark]



**Question 6**

Carol spins a spinner 80 times.

The table shows information about her results.

Outcome	Frequency
J	39
K	25
L	16

Dan spins this spinner 300 times.

Work out an estimate for the number of times that Dan will get an L.

**[3 marks]**



**Question 7**

When a drawing pin is dropped it can land point down or point up.

Lucy, Mel and Tom each dropped the drawing pin a number of times.

The table shows the number of times the drawing pin landed point down and the number of times the drawing pin landed point up for each person.

	Lucy	Mel	Tom
point down	31	53	16
point up	14	27	9

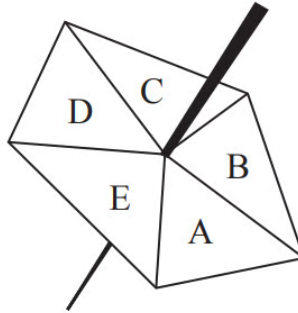
Rachael is going to drop the drawing pin once.

- (a) Whose results will give the best estimate for the probability that the drawing pin will land point up?  
Give a reason for your answer.

[1 mark]

**Question 8**

Here is a five-sided spinner.



The table shows the probabilities that the spinner will land on A or on B or on C or on D.

<b>Letter</b>	A	B	C	D	E
<b>Probability</b>	0.25	0.10	0.20	0.15	

Kirsty spins the spinner once.

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

**[2 marks]**





**Question 9**

There are some black pens, some blue pens, some red pens and some green pens in a box.

The table shows the probabilities that a pen taken at random from the box will be black or will be blue or will be red.

<b>colour</b>	black	blue	red	green
<b>probability</b>	0.3	0.2	0.4	

There are 200 pens in the box.

(a) Work out the number of black pens in the box.

[2 marks]



**Question 10**

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

The table shows the probabilities that a counter taken at random from the bag will be green or yellow or red.

Colour	Green	Yellow	Blue	Red
Probability	0.16	0.4		0.24

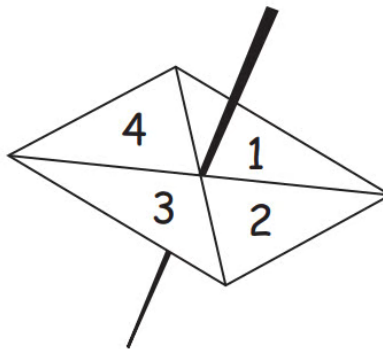
Mary takes at random a counter from the bag.

(a) Work out the probability that the counter will be blue.

**[2 marks]**

### Question 11

Here is a four sided spinner.  
The spinner is biased.



The table shows the probabilities that the spinner will land on 1 or on 3

<b>Number</b>	1	2	3	4
<b>Probability</b>	0.2		0.1	

The probability that the spinner will land on 2 is the same as the probability that the spinner will land on 4

(a) Work out the probability that the spinner will land on 4

[3 marks]



**Question 12**

There are only red counters, blue counters, white counters and black counters in a bag.

The table shows the probability that a counter taken at random from the bag will be red or blue.

<b>Colour</b>	red	blue	white	black
<b>Probability</b>	0.2	0.5		

The number of white counters in the bag is the same as the number of black counters in the bag.

Tania takes at random a counter from the bag.

(a) Work out the probability that Tania takes a white counter.

**[2 marks]**



**Question 13**

There are 240 counters in the bag.

(b) Work out the number of red counters in the bag.

**[2 marks]**



**Question 14**

Shunya is going to spin the spinner 200 times.

(b) Work out an estimate for the number of times the spinner will land on 3

[2 marks]

**Question 15**

There are some dark chocolates, some milk chocolates and some white chocolates in a box.

The table below shows the probabilities that a chocolate taken at random from the box is a dark chocolate or is a milk chocolate.

	Dark chocolate	Milk chocolate	White chocolate
Probability	0.35	0.17	

A chocolate is taken at random from the box.

(c) Work out the probability that the chocolate is a white chocolate.

[2 marks]