

Revision Exercise 3

1.

Suha is going to buy 150 envelopes.

Here is some information about the cost of envelopes in two shops.

Letters2send Pack of 25 envelopes for £3.49

Stationery World Pack of 10 envelopes for £2.10 Buy 2 packs get 1 pack free
--

Suha wants to buy the envelopes as cheaply as possible.

Which shop should Suha buy the 150 envelopes from?

You must show how you get your answer.

(4 marks)

2.

The table shows the probabilities that a biased dice will land on 2, on 3, on 4, on 5 and on 6

Number on dice	1	2	3	4	5	6
Probability		0.17	0.18	0.09	0.15	0.1

Neymar rolls the biased dice 200 times.

Work out an estimate for the total number of times the dice will land on 1 or on 3

(3 marks)

3.

Cups are sold in packs and in boxes.

There are 12 cups in each pack.

There are 18 cups in each box.

Alison buys p packs of cups and b boxes of cups.

Write down an expression, in terms of p and b , for the total number of cups Alison buys.

.....
(2 marks)

4.

A path is made of white tiles and grey tiles.

$\frac{1}{4}$ of the tiles are white.

(a) Write down the ratio of white tiles to grey tiles.

.....
(1)

There is a total of 56 tiles.

(b) Work out the number of grey tiles.

.....
(2)

5.

Priti is going to have a meal.

She can choose one starter and one main course from the menu.

Menu	
Starter	Main Course
Salad	Pasta
Fish	Rice
Melon	Burger

Write down all the possible combinations Priti can choose.

.....

.....

.....

(2 marks)

6.

Joanne wants to buy a dishwasher.

The dishwasher costs £372

Joanne will pay a deposit of £36

She will then pay the rest of the cost in 4 equal monthly payments.

How much is each monthly payment?

£.....

(2 marks)

7.

ABC is a straight line.



The length AB is five times the length BC .

$AC = 90$ cm.

Work out the length AB .

(3 marks)

8.

Davos is a cleaner.

The table shows information about the time it will take him to clean each of four rooms in a house.

Room	Time
Kitchen	2 hours
Sitting room	1 hour 40 minutes
Bedroom	$1\frac{1}{2}$ hours
Bathroom	45 minutes

Davos wants to clean all four rooms in one day.
He will have breaks for a total time of 75 minutes.

Davos is going to start cleaning at 9 am.

Will he finish cleaning by 4 pm?
You must show all your working.

(3 marks)

9.

The size of the largest angle in a triangle is 4 times the size of the smallest angle.
The other angle is 27° less than the largest angle.

Work out, in degrees, the size of each angle in the triangle.
You must show your working.

.....^o ,^o ,^o
(5 marks)

10.

Andy went on holiday to Canada.
His flights cost a total of £1500

Andy stayed for 14 nights.
His hotel room cost \$196 per night.

Andy used wifi for 12 days.
Wifi cost \$5 per day.

The exchange rate was \$1.90 to £1

- (a) Work out the total cost of the flights, the hotel room and wifi.
Give your answer in pounds.

(b) If there were fewer dollars to £1, what effect would this have on the total cost, in pounds, of Andy's holiday?

(6 marks)

11.

Daniel bakes 420 cakes.

He bakes only vanilla cakes, banana cakes, lemon cakes and chocolate cakes.

$\frac{2}{7}$ of the cakes are vanilla cakes.

35% of the cakes are banana cakes.

The ratio of the number of lemon cakes to the number of chocolate cakes is 4:5

Work out the number of lemon cakes Daniel bakes.

(5 marks)