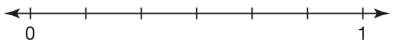
Probability

REVIEW IT!

You may **not** use a calculator for these questions.

1 Approximately 12% of people are left-handed. In a school of 250 students how many would you expect to be left-handed?

2 A fair dice is rolled. Mark the probability of each of these events on a probability scale.



A – rolling an even number

B – rolling a factor of 6

C – rolling a 7

D – rolling a number smaller than 8.

3 The probability that it will rain tomorrow is 0.3. What is the probability that it won't rain?

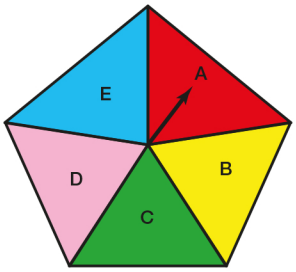
4 Which of the following pairs of events are mutually exclusive:

A – rolling a prime number and rolling an even number on a dice

B – rolling a 3 and rolling a factor of 7 on a dice

C – rolling a 1 and rolling an even number on a dice.

5 A fair 5-sided spinner is labelled with the letters A to E.



a What is the probability of **not** spinning a vowel (A or E)?

b The spinner is spun 25 times. How many times can you expect to spin a letter B?

6 Complete the two-way table showing lunch choices:

	Pizza	Pasta	Risotto	Total
Cake	12			
Ice cream		11	10	
Total	22	17		50

7 A box of chocolates contains milk, white and dark chocolates.

The table shows the probability of picking each type of chocolate.

Chocolate	Milk	White	Dark
Probability	0.2	$5x + 0.2$	x

Work out the probability of picking a white chocolate.

8 Yan and Ethan have two dice. They think that the dice might be biased.

Yan rolls his dice four times and gets: 2, 2, 6, 1.

a Yan says 'my dice must be biased'. Is he correct? Justify your answer.

b Ethan rolls his dice 50 times and records his results.

Score	1	2	3	4	5	6
Frequency	12	9	16	7	6	0

Ethan decides to roll his dice another 100 times.

Using the results in the table, estimate the number of times he should expect to roll a 2.