

# Probability

## Difficulty: Easy

### Question Paper 2

Level	IGCSE
Subject	Maths (0580/0980)
Exam Board	CIE
Topic	Probability
Sub-Topic	Probability
Paper	Paper 2
Difficulty	Easy
Booklet	Question Paper 2

**Time allowed:** 43 minutes

**Score:** /33

**Percentage:** /100

#### Grade Boundaries:

##### CIE IGCSE Maths (0580)

A*	A	B	C	D	E
>88%	76%	63%	51%	40%	30%

##### CIE IGCSE Maths (0980)

9	8	7	6	5	4	3
>94%	85%	77%	67%	57%	47%	35%

## Question 1

Paul and Sammy take part in a race.

The probability that Paul wins the race is  $\frac{9}{35}$

The probability that Sammy wins the race is 26%.

Who is more likely to win the race?

Give a reason for your answer.

[2]

## Question 2

A biased 4-sided dice is rolled. The possible scores are 1, 2, 3 or 4. The probability of rolling a 1, 3 or 4 is shown in the table.

Score	1	2	3	4
Probability	0.15		0.3	0.35

[2]

Complete the table.



## Question 4

S P A C E S

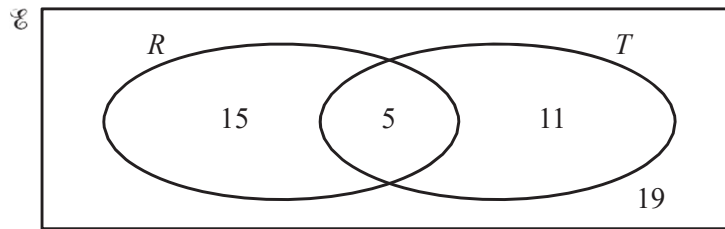
One of the 6 letters is taken at random.

(a) Write down the probability that the letter is S. [1]

(b) The letter is replaced and again a letter is taken at random.  
This is repeated 600 times.

How many times would you expect the letter to be S? [1]

## Question 5



The Venn diagram shows the number of red cars and the number of two-door cars in a car park. There is a total of 50 cars in the car park.

$R = \{\text{red cars}\}$  and  $T = \{\text{two-door cars}\}$ .

(a) A car is chosen at random.

Write down the probability that

(i) it is red and it is a two-door car, [1]

(ii) it is not red and it is a two-door car. [1]

(b) A two-door car is chosen at random.

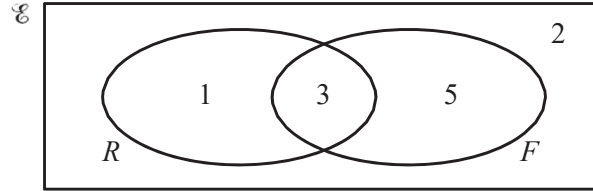
Write down the probability that it is not red. [1]

(c) Two cars are chosen at random.

Find the probability that they are both red. [2]

(d) On the Venn diagram, shade the region  $R \cup T'$ . [1]

## Question 6



11 students are asked if they like rugby ( $R$ ) and if they like football ( $F$ ).  
The Venn diagram shows the results.

(a) A student is chosen at random.

What is the probability that the student likes rugby **and** football?

[1]

(b) On the Venn diagram shade the region  $R' \cap F'$ .

[1]

## Question 7

The Ocean View Hotel has 300 rooms numbered from 100 to 399.  
A room is chosen at random.

Find the probability that the room number ends in zero.

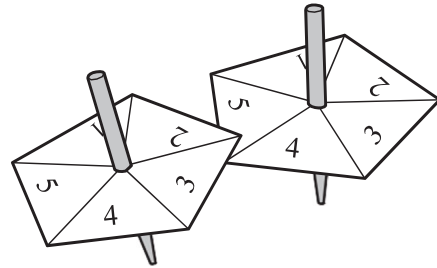
[2]



## Question 8

Two spinners have sections numbered from 1 to 5.  
Each is spun once and each number is equally likely.  
The possibility diagram is shown below.

	5	+	+	+	+	+
	4	+	+	+	+	+
Second spinner	3	+	+	+	+	+
	2	+	+	+	+	+
	1	+	+	+	+	+
		1	2	3	4	5
		First spinner				



Find the probability that

(a) both spinners show the same number,

[2]

(b) the sum of the numbers shown on the two spinners is 7.

[2]

## Question 9

**In this question, give all your answers as fractions.**

A box contains 3 red pencils, 2 blue pencils and 4 green pencils.  
Raj chooses 2 pencils at random, without replacement.

Calculate the probability that

(a) they are both red,

[2]

(b) they are both the same colour,

[3]

(c) exactly one of the two pencils is green.

[3]