## **♦** Maths teacher hub

## Foundation Homework 36: Probability

1. There are 15 counters in a bag. 5 red, 3 green and the rest are blue.

Write down the probability of selecting:

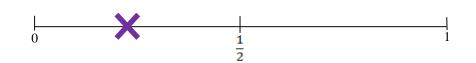
(i) Green

(ii) Not blue

(iii) Red or blue

(3 marks)

2. On the probability scale below, mark with an X The probability of being born in the summer.



(1 mark)

3. The table below shows the probabilities of choosing a counter from a bag.

Red	Blue	Green	Orange
0.3	х	0.2	х

The probability of blue and orange is the same Work out the value of x.

0.25 (1 mark)

**Pass** 

25

4. There are 60 adults who took their driving test yesterday. 36 of the people were women One quarter of the men didn't pass. 11 of the women didn't pass.

(a) Complete the frequency tree.

11 Fail

**Pass** 18

(b) How many people passed the test? 43 Men 6

women

36

24

Fail

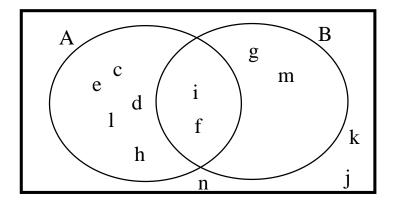
(3 marks

60

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5. Below is Venn diagram showing some data.



Write down the probability of selecting:

(i)  $\boldsymbol{A}$ 

(ii)  $A \cap B$ 

(iii)  $A \cup B$ 

/					
$\overline{12}$					
• • • • • •	1	• • •	• • •	• •	•

(3 marks)

6. Marcus is going to roll 2 fair 5 sided dice.

He will then sum the scores together.

(a) Draw a sample space diagram to show this.

+	1	2	3	4	5
1	2	3	4	5	6
2	3	4	5	6	7
3	4	5	6	7	8
4	5	6	7	8	9
5	6	7	8	9	10

(b) Calculate the probability of getting at least a 7 on the dice.

(4 marks)