

1. There are 18 counters in a bag. 8 red, 4 yellow and the rest are purple.

Write down the probability of selecting:

(i) Red

$\frac{4}{9}$

(ii) Not purple

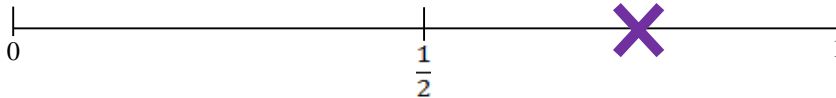
$\frac{2}{3}$

(iii) Yellow or purple

$\frac{5}{9}$

(3 marks)

2. On the probability scale below, mark with an X
The probability of being **not** born in the winter.



(1 mark)

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

Red	Blue	Green	Orange
x	0.24	0.3	x

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

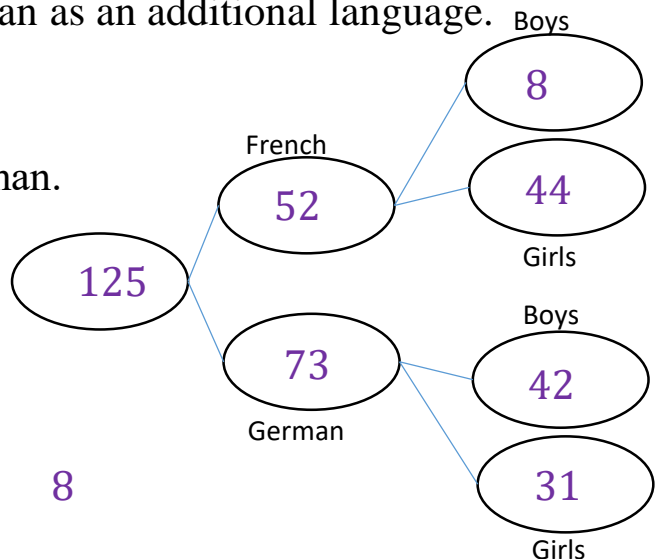
x = 0.23

(1 mark)

4. In Year 7, you learn French or German as an additional language.

There is 125 students in Year 7
52 are studying French
31 out of the '75 girls' studied German.

(a) Complete the frequency tree.

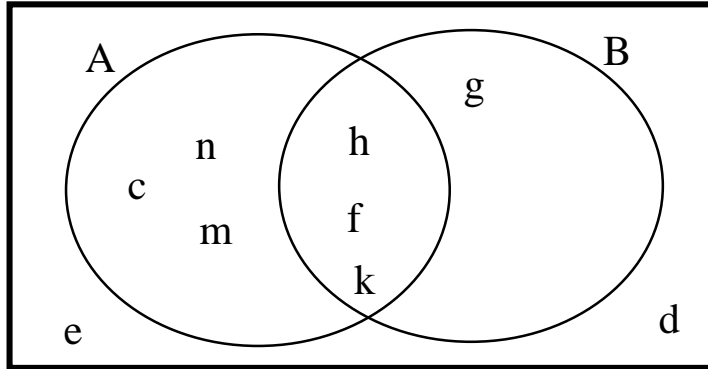


(b) How many boys study French?

8

(3 marks)

5. Below is Venn diagram showing some data.



Write down the probability of selecting:

(i) A'

$\frac{1}{3}$
.....

(ii) $A \cap B$

$\frac{1}{3}$
.....

(iii) $A \cup B$

$\frac{7}{9}$
.....

(3 marks)

6. Hannah is going to roll 2 fair 6 sided dice.

She will then product the scores together.

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

x	1	2	3	4	5	6
1	1	2	3	4	5	6
2	2	4	6	8	10	12
3	3	6	9	12	15	18
4	4	8	12	16	20	24
5	5	10	15	20	25	30
6	6	12	18	24	30	36

(b) Calculate the probability of getting a total of 12.

$\frac{1}{9}$
.....

(4 marks)

Score =