

1. There are 15 counters in a bag. 5 red, 4 yellow and the rest are blue.

Write down the probability of selecting:

(i) Blue

$$\frac{2}{5}$$

(ii) Red or blue

$$\frac{11}{15}$$

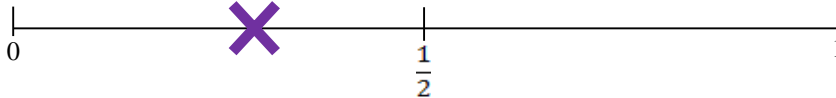
(iii) Not red

$$\frac{2}{3}$$

(3 marks)

2. On the probability scale below, mark with an X

The probability of rolling a number more than 4 on a dice.



(1 mark)

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

| Red | Blue | Green | Orange |
|------|------|-------|--------|
| 0.64 | x | x | x |

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

$$x = \dots\dots\dots 0.12$$

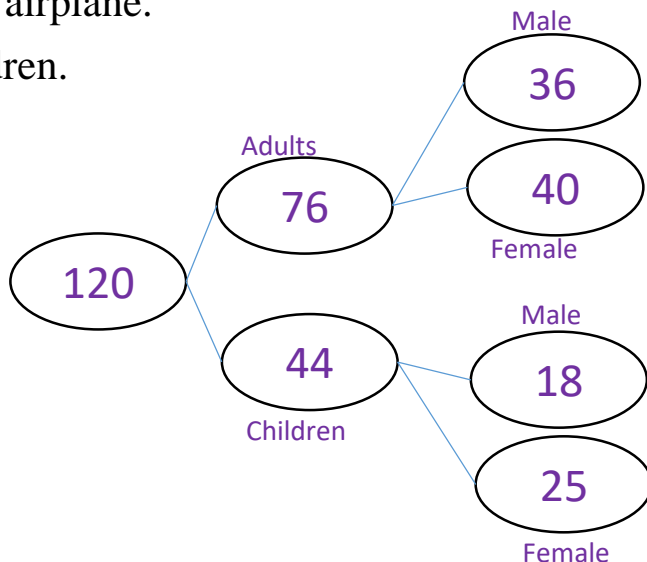
(1 mark)

4. There are 120 passengers on an airplane.

44 of the passengers were children.

40 of the females were adults.

(a) Draw a frequency tree.



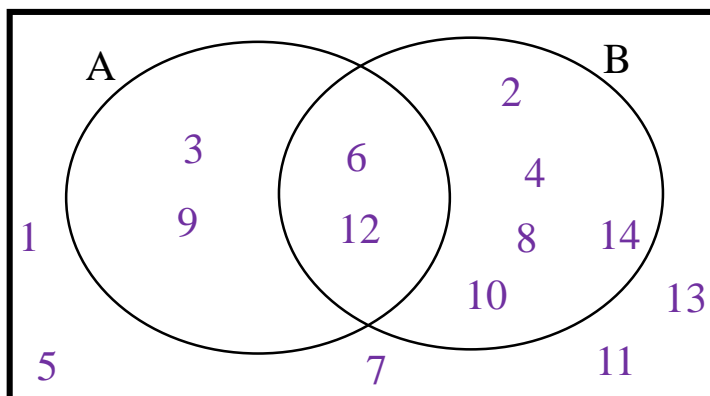
(4 marks)

5. Input this data into the Venn diagram below.

$\mathcal{E} = \{\text{Positive integers less than 15}\}$

$A = \{\text{Multiples of 3}\}$

$B = \{\text{Even numbers}\}$



Write down the probability of selecting:

(i) $A \cap B$

$\frac{1}{7}$

(ii) $A \cup B$

$\frac{9}{14}$

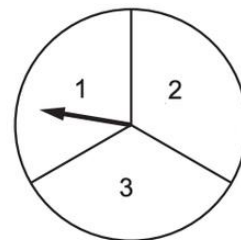
(4 marks)

6. Benjamin is going to spin the two spinners.

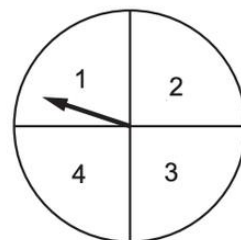
He will then sum the scores together.

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

| | | | | |
|---|---|---|---|---|
| + | 1 | 2 | 3 | 4 |
| 1 | 2 | 3 | 4 | 5 |
| 2 | 3 | 4 | 5 | 6 |
| 3 | 4 | 5 | 6 | 7 |



Spinner A



Spinner B

(b) Calculate the probability of getting a prime number total.

$\frac{1}{2}$

(3 marks)

Score =