

SCORE

# Data & Measurement

With Classified  
answer book

8

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## 2- Mutually Exclusive Outcome

indicate the probabilities of the different outcomes:

- 1) Rolling a 3 or a 4 on a fair dice.
  
- 2) Rolling a 1 or a multiple of 3 on a fair dice.
  
- 3) Picking a B or N from cards with the letters B R A I N.
  
- 4) Picking a blue or green counter from a bag containing 2 blue counters, 4 green counters and 7 yellow counters.
  
- 5) Drawing a multiple of 3, 4, or 5 from a pack of 10 cards numbered 1 to 10.
  
- 6) Not rolling a 1 or a 2 on a fair dice.

7) On a biased dice, the probability of rolling a 1 or 2 is 0.5 and the probability of rolling a 1 is 0.2. Find the probability of rolling a 2.

8) From a set of cards, the probability of picking a 4 or a 5 is  $\frac{7}{10}$  and the probability of picking a 4 is  $\frac{3}{10}$ . Find the probability of picking a 5.

9) Find the probability for red.

Blue	Green	Red
0.1	0.4	

10) Find the probability for C.

A	B	C	D
0.15	0.3		0.25

11) The probabilities for train and walk are equal. What are they?

Car	Bus	Train	Walk
0.4	0.3		

12) Work out the probability for each colour.

Blue	Red	Green	Pink
$x$	$2x$	$3x$	$4x$

13 There are 50 cars in a car park. 15 cars are silver, 8 cars are white and 9 cars are black. A car is chosen at random. Work out the probability that the car is

- a black or white
- b not silver
- c neither silver nor black.

14 There are 25 balls in a box, numbered from 1 to 25. A ball is chosen at random.

- a Find the probability that the number is
  - i an odd number
  - ii an even number
  - iii not a multiple of 7.
- b Tekka says:

$P(\text{multiple of } 3) = \frac{8}{25}$   
and  $P(\text{multiple of } 5) = \frac{5}{25}$ , so  
 $P(\text{multiple of } 3 \text{ or multiple of } 5) = \frac{8}{25} + \frac{5}{25} = \frac{13}{25}$ .

What mistake has Tekka made?