

## SIMPLE PROBABILITY

### Compliment of an events

<p><b>Q1.</b> The probability that Isaac goes swimming is 0.42. Find the probability that he does not go swimming</p> <p style="text-align: center;">-                      =</p>	<p><b>Q2.</b> The yellow marble is picked at random from a box is 0.65. find the probability that a yellow marble is not picked up.</p> <p style="text-align: center;">-                      =</p>																										
<p><b>Q3.</b> The following table shows the modes of transport for a group of students</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <thead> <tr> <th style="width: 60%;">Mode of transport</th> <th style="width: 40%;">Frequency</th> </tr> </thead> <tbody> <tr> <td>Bus</td> <td style="text-align: center;">225</td> </tr> <tr> <td>Car</td> <td style="text-align: center;">50</td> </tr> <tr> <td>Motorcycle</td> <td style="text-align: center;">145</td> </tr> </tbody> </table> <p>n(S) =</p> <p>A student is chosen at random, find the probability that the student go to school by</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td style="width: 50%; padding: 5px;"> <p>a) Bus</p> <p>P(Bus) = _____</p> </td> <td style="width: 50%; padding: 5px;"> <p>b) Not by bus</p> <p>P(not by bus)</p> <p>=                      -                      _____</p> <p>= _____</p> </td> </tr> </tbody> </table>	Mode of transport	Frequency	Bus	225	Car	50	Motorcycle	145	<p>a) Bus</p> <p>P(Bus) = _____</p>	<p>b) Not by bus</p> <p>P(not by bus)</p> <p>=                      -                      _____</p> <p>= _____</p>	<p><b>Q4.</b> A fair dice is tossed. The table below shows the results of the experiment.</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <thead> <tr> <th style="width: 15%;">Number</th> <th style="width: 10%;">1</th> <th style="width: 10%;">2</th> <th style="width: 10%;">3</th> <th style="width: 10%;">4</th> <th style="width: 10%;">5</th> <th style="width: 10%;">6</th> </tr> </thead> <tbody> <tr> <td>Frequency</td> <td style="text-align: center;">250</td> <td style="text-align: center;">360</td> <td style="text-align: center;">225</td> <td style="text-align: center;">165</td> <td style="text-align: center;">420</td> <td style="text-align: center;">180</td> </tr> </tbody> </table> <p>n(S) =</p> <p>Find the probability of obtaining</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td style="width: 50%; padding: 5px;"> <p>a) Prime number</p> <p>n(prime number)</p> <p>= _____</p> <p>P(prime number)</p> <p>= _____</p> </td> <td style="width: 50%; padding: 5px;"> <p>b) Not prime number</p> <p>P(not prime number)</p> <p>=                      -                      _____</p> <p>= _____</p> </td> </tr> </tbody> </table>	Number	1	2	3	4	5	6	Frequency	250	360	225	165	420	180	<p>a) Prime number</p> <p>n(prime number)</p> <p>= _____</p> <p>P(prime number)</p> <p>= _____</p>	<p>b) Not prime number</p> <p>P(not prime number)</p> <p>=                      -                      _____</p> <p>= _____</p>
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<p><b>Q6.</b> In a farewell party, there are 20 canned drink, 10 box drinks and 12 bottles drinks for a group of 42 guests. Find the probability that a guest picked a non-bottled drink.</p> <p>n(S) =</p> <p>P(bottle drink) = _____</p> <p>P(non bottle drink) =                      -                      _____</p> <p style="text-align: center;">= _____</p>	<p><b>Q7.</b> There are 30 adults and 10 children in a bus. 5 adults and 4 children got off the bus at the first bus stop. If a passanger is chosen at random after that, find the probability that the passanger chosen is not an adult.</p> <p>n(S) =</p> <p>P(adult) = _____</p> <p>P(not adult) =                      -                      _____</p> <p style="text-align: center;">= _____</p>																										

Q8.

Given that set  $P = \{1, 2, 3, 4, 5, 6\}$  and  $Q = \{\text{Red, Blue, Black, Yellow, white}\}$ . A number is chosen at random from set  $P$  and coloured card is chosen from another box.

Complete the table below:

	Red (R)	Blue (E)	Black (C)	Yellow (Y)	White (W)
1	1,R				
2					
3					
4					
5					
6					

$n(S) =$

From the table, answer the following questions.

- a) What is probability of number 1,2,3 and colour with 3,4 and 5 letter is chosen?

$n(A) =$

$P(A)$

$=$  \_\_\_\_\_

- b) What is probability of even number and colour with letter B is chosen

$n(\text{even number, letter B colour}) =$

$P(\text{even number, letter B colour})$

$=$  \_\_\_\_\_

Q9.

Two box contains a set of letter cards which can form a word "KEMAHIRAN" and a number is picked from  $\{2,4,6,8,10\}$ . A letter and a number are picked at random from the box. List all the elements of event of picking by completing the table below:

	2	4	6	8	10
K					
E					
M					
A					
H					
I					
R					
A					
N					

From the table, answer the following questions.

$n(S) =$

- a) What is probability of multiple of 4 and vowel is chosen?

$n(A) =$

$P(A)$

$=$  \_\_\_\_\_

- b) What is probability of factor of 16 and consonant is chosen

$n(\text{factor 16, consonant}) =$

$P(\text{factor 16, consonant})$

$=$  \_\_\_\_\_

