

Exersi Practice Set 5.1

1. (i) Probability = $\frac{\text{Possible outcomes}}{\text{Total number of outcomes}}$
 $= \frac{1}{8}$

(ii) Probability = $\frac{\text{Possible outcomes}}{\text{Total number of outcomes}}$
 $= \frac{1}{7}$

(iii) Probability = $\frac{\text{Possible outcomes}}{\text{Total number of outcomes}}$
 $= \frac{4}{52}$

(iv) Probability = $\frac{\text{Possible outcomes}}{\text{Total number of outcomes}}$
 $= \frac{1}{10}$

S. No	Random Experiment	Sample Space	Number of S
1	One coin is tossed	$S = \{H, T\}$	$S = 2$
2	Two coins are tossed	$S = \{HH, HT, TH, TT\}$	$S = 4$
3	Three coins are tossed	$S = \{HHH, HHT, HTH, THH, HTT, THT, TTH, TTT\}$	

Practice Set 5.2

1) (i) $n(S) = (S) \text{ of die } \times (S) \text{ of coin}$
 6×2
 $= 12$

(ii) $n(S) = \text{Total 2 digit number which can be formed from the digits 2, 3 and 5}$
 $= 23, 25, 32, 35, 52, 53$
 $= 6$

2) (iii) We cannot find exactly on which colour it may stop on, but we can find the probability of all the colours.

$$\text{probability} = \frac{\text{Possible outcome}}{\text{Total outcomes}}$$

$$= \frac{1}{6}$$

There is a $\frac{1}{6}$ chance for every colour to be picked

3) $n(S) = \text{Multiple of 5 in the month of March 2019}$
 $= \text{Total number of days in the month of March 2019}$
 $= \frac{31}{5}$

• = The multiples of 5 that come before 31

= 5, 10, 15, 20, 25, 30

= 6 multiples