PROBABILITY

① Random Experiment: → Any task which you performed
→ Throwing a die ② tossing a coin

what are the possible values?
what is the value we get?

② Outcome : the possible results of the Experiment

1, 2, 3, 4, 5, 6 → Outcomes of die

Sets:

$A = \{1, 2, 3, 4\}$

$B = \{3, 4, 5, 6\}$

$A \cup B \Rightarrow A$ or $B \Rightarrow \{1, 2, 3, 4, 5, 6\}$

$A \cap B \Rightarrow A$ and $B \Rightarrow \{3, 4\}$

③ Sample space / Outcome space :

$\Omega = \{1, 2, 3, 4, 5, 6\}$

④ Event : Any subset of Sample space is called event.

Subset : Any small set which comes from a set

$A_1 = \{1\} \Rightarrow$ subset of Ω

$A_2 = \{2\} \Rightarrow$ subset of Ω

$A_{13} = \{1, 3\} \Rightarrow$ subset of Ω

$A_{1,2,3,4,5,6} = \{1, 2, 3, 4, 5, 6\} \rightarrow$ subset of Ω