

Task 7 notes :-

Probability is the likelihood of one or more events occurring. It represents the possibility of getting a certain outcome. Probability can also be described as the probability of an event occurring divided by the number of expected outcomes of the event.

$$\text{Probability of an event} = \frac{\text{Number of favourable outcomes}}{\text{Total number of outcomes}}$$

The *probability* of an event occurring is intuitively understood to be the likelihood or chance of it occurring. It is denoted by P(event).

A and B two events from the same sample set. If $P(A)+P(B)=1$

$0 \leq P(A) \leq 1$ event

$P(B)=1-P(A)$ opposite event

the probability for a composite event is calculated by multiplying the “probability of the first event” with the “probability of the second event”

simple example of composite probability is “*flipping a coin twice*”. This example is highly similar to the example mentioned in the introduction. It demonstrates that the chance of “*getting head*” in a single event is 0.50 and the chance is 0.50 when the coin is tossed for a second time. Therefore, the composite/compound probability is $0.50 \times 0.50 = 0.25$. Alternatively, the composite probability is 25