

Task9-notes

Conditional probability is known as the possibility of an event or outcome happening, based on the existence of a previous event or outcome $P(A|B)$.

Where $P(A|B)$ represents the probability of occurrence of A given B has occurred.

It is calculated by multiplying the probability of the preceding event by the renewed probability of the succeeding, or conditional, event.

example, given that you drew a red card, what's the probability that it's a four ($p(\text{four} | \text{red}) = 2/26 = 1/13$). So out of the 26 red cards (given a red card), there are two fours so $2/26 = 1/13$.

$$P(B|A) = \frac{P(A \text{ and } B)}{P(A)}$$