

Q) In a lottery, a man chooses five different natural numbers at random from 1 to 10 and if these five numbers match with the five numbers already fixed by the lottery committee, he wins the prize. What is the probability that he wins the prize?

Answer :

There are total ${}^{10}C_5$ choices that he has to choose from.

Out of which only one will win him the prize.

So, the chance of winning a prize is

$$= 1 / {}^{10}C_5$$

$$= 1/252$$