

A die is rolled three times. The probability of getting a number larger than the previous number each time is

A $11/72$

B $5/54$

C $19/216$

D $7/18$

Correct option is B)

Total number of ways = $6 \times 6 \times 6$

$$\therefore n(S) = 216$$

The number of favorable ways = 6C_3

$$\therefore n(E) = {}^6C_3$$

$$\text{Hence, required probability} = \frac{{}^6C_3}{6 \times 6 \times 6} = \frac{5}{54}$$