

Binomial Theorem - Class XI

Related Questions with Solutions

Questions

Question: 01

The coefficient of x^9 in $(1 + 3x + 3x^2 + x^3)^{15}$ is

- A. ${}^{45}C_9$
- B. ${}^{15}C_9$
- C. 0
- D. None of these

Solutions

Solution: 01

Since, $[1 + 3x + 3x^2 + x^3]^{15} = [[1 + x]^3]^{15} = [1 + x]^{45}$

Hence, the coefficient of x^9 in $[1 + x]^{45}$ is ${}^{45}C_9$

Correct Options

Answer:01

Correct Options: A