



Combinations - nCr and Factorial to nPr Value

1

A permutation equals its combination times r factorial: $nPr = nCr \times r!$. Using the combination and factorial below, what is the value of the matching permutation?

$${}^5C_3 = 10 \quad \text{and} \quad 3! = 6$$

A

$${}^5P_3 = 10$$

B

$${}^5P_3 = 6$$

2

A permutation equals its combination times r factorial: $nPr = nCr \times r!$. Using the combination and factorial below, what is the value of the matching permutation?

$${}^3C_2 = 3 \quad \text{and} \quad 2! = 2$$

A

$${}^3P_2 = 6$$

B

$${}^3P_2 = 2$$

3

A permutation equals its combination times r factorial: $nPr = nCr \times r!$. Using the combination and factorial below, what is the value of the matching permutation?

$${}^4C_2 = 6 \quad \text{and} \quad 2! = 2$$

A

$${}^4P_2 = 12$$

B

$${}^4P_2 = 2$$

4

A permutation equals its combination times r factorial: $nPr = nCr \times r!$. Using the combination and factorial below, what is the value of the matching permutation?

$${}^5C_2 = 10 \quad \text{and} \quad 2! = 2$$

A

$${}^5P_2 = 2$$

B

$${}^5P_2 = 20$$

5

A permutation equals its combination times r factorial: $nPr = nCr \times r!$. Using the combination and factorial below, what is the value of the matching permutation?

$${}^5C_4 = 5 \quad \text{and} \quad 4! = 24$$

A

$${}^5P_4 = 5$$

B

$${}^5P_4 = 24$$

6

A permutation equals its combination times r factorial: $nPr = nCr \times r!$. Using the combination and factorial below, what is the value of the matching permutation?

$${}^4C_3 = 4 \quad \text{and} \quad 3! = 6$$

A

$${}^4P_3 = 24$$

B

$${}^4P_3 = 10$$