



Math worksheet on 'Probability nPm Notation - De Formula (Level 1)'. Part of a broader unit on 'Probability - Permutations and Combinations Calculations'.

Learn online:

app.mobius.academy/math/units/probability_and_statistics_permutations_and_combinations

1

Select the correct formula for this description

Choose 2 options in a specific order from a group of 3 options

| | | | |
|----------|--------------------------|----------|--------------------------|
| a | $\frac{3!}{1! \cdot 2!}$ | b | $3!$ |
| c | $\frac{3!}{3!}$ | d | $2!$ |
| e | $\frac{3!}{2!}$ | f | $\frac{3!}{2! \cdot 1!}$ |

2

Select the correct formula for this description

With a group of 4 items, if you choose 3 in a specific order, how many permutations are possible?

| | | | |
|----------|--------------------------|----------|------|
| a | $\frac{4!}{1! \cdot 2!}$ | b | $4!$ |
| c | $\frac{4!}{3! \cdot 1!}$ | d | $6!$ |
| e | $3!$ | | |

3

Select the correct formula for this description

From a group of 4 options how many ways are there to choose 2 options in a specific order?

| | | | |
|----------|-----------------------------------|----------|--------------------------|
| a | $\frac{4!}{2!}$ | b | $3!$ |
| c | $\frac{4!}{2! \cdot 1! \cdot 3!}$ | d | $\frac{4!}{2! \cdot 2!}$ |
| e | $\frac{5!}{3!}$ | f | $\frac{2!}{2!}$ |

4

Select the correct formula for this description

With a group of 4 items, if you choose 4 in a specific order, how many permutations are possible?

| | | | |
|----------|--------------------------|----------|-----------------|
| a | $4!$ | b | $\frac{4!}{3!}$ |
| c | $\frac{4!}{4! \cdot 0!}$ | d | $\frac{4!}{2!}$ |
| | | | |

5

Select the correct formula for this description

With a group of 5 items, if you choose 4 in a specific order, how many permutations are possible?

| | | | |
|----------|-----------------|----------|--------------------------|
| a | $\frac{4!}{2!}$ | b | $\frac{5!}{4! \cdot 1!}$ |
| c | $\frac{5!}{3!}$ | d | $4!$ |
| e | $5!$ | f | $6!$ |

6

Select the correct formula for this description

Choose 3 options in a specific order from a group of 3 options

| | | | |
|----------|--------------------------|----------|-----------------|
| a | $\frac{3!}{3! \cdot 0!}$ | b | $\frac{5!}{3!}$ |
| c | $3!$ | d | $\frac{3!}{3!}$ |
| e | $\frac{3!}{1! \cdot 3!}$ | | |

7

Select the correct formula for this description

From a group of 6 options how many ways are there to choose 4 options in a specific order?

| | | | |
|----------|--------------------------|----------|-----------------|
| a | $\frac{6!}{4! \cdot 2!}$ | b | $7!$ |
| c | $\frac{4!}{2!}$ | d | $\frac{6!}{2!}$ |
| e | $\frac{6!}{2! \cdot 3!}$ | f | $\frac{5!}{3!}$ |