



Probability Linear or Circular Permutation - Scenario to Formula

1

Which formula counts the number of arrangements in this scenario?

A class of 5 students line up in a single row for a class photo. How many different left-to-right line-ups are possible?

A $(n + 1)!$	B $n!$
C $(n - 2)!$	D $(n - 1)!$

2

Which formula counts the number of arrangements in this scenario?

6 different books are arranged in a row on a shelf. How many arrangements are possible?

A $n!$	B $(n + 1)!$
C $(n - 1)!$	D $\frac{n!}{2}$

3

Which formula counts the number of arrangements in this scenario?

5 campers stand evenly spaced in a circle around a campfire. How many distinct arrangements are possible if arrangements that are rotations of each other count as the same?

A $(n - 1)!$	B $(n - 2)!$
C $\frac{(n - 1)!}{2}$	D $n!$

4

Which formula counts the number of arrangements in this scenario?

7 ornaments are hung at equally spaced positions around a circular wreath. How many distinct arrangements are possible if rotations of the wreath count as the same?

A $(n + 1)!$	B $(n - 2)!$
C $(n - 1)!$	D $\frac{(n - 1)!}{2}$

5

Which formula counts the number of arrangements in this scenario?

5 friends ride in the identical cars of a Ferris wheel arranged in a circle. How many distinct arrangements are possible if rotations of the wheel count as the same?

A $(n + 1)!$	B $(n - 1)!$
C $n!$	D $(n - 2)!$

6

Which formula counts the number of arrangements in this scenario?

4 ornaments are hung at equally spaced positions around a circular wreath. How many distinct arrangements are possible if rotations of the wreath count as the same?

A $(n - 2)!$	B $(n + 1)!$
C $(n - 1)!$	D $\frac{(n - 1)!}{2}$

7

Which formula counts the number of arrangements in this scenario?

4 different books are arranged in a row on a shelf. How many arrangements are possible?

A $\frac{n!}{2}$	B $(n - 1)!$
C $(n - 2)!$	D $n!$

8

Which formula counts the number of arrangements in this scenario?

6 dancers form a single ring for a performance. How many distinct arrangements are possible if rotations of the ring count as the same?

A $n!$	B $\frac{(n - 1)!}{2}$
C $(n - 1)!$	D $(n - 2)!$