#04 SA Permutations

SCROLL DOWN
:)

✓ In how many ways can the letters of the word PERMUTATIONS be arranged if the words start with A end with N? * 1/1

$12!$

Option 1

$10!$

Option 2

$\frac{10!}{2!}$

Option 3 ✓

$\frac{12!}{2!}$

Option 4

✓ How many words (with or without meaning) can be formed by using all the letters of the word, 'DELHI' using each letter exactly once when the relative positions of consonants and vowels remains unchanged * 1/1

5!

3! x 2! ✓

3!x2! x 2

3!+2!

✓ Find the number of ways in which the letters of the word ‘MACHINE‘ can be arranged such that the vowels may occupy only odd positions. * 1/1

- ○ 5040
- ○ 144
- ◉ 576 ✓
- ○ 4464

✓ In how many ways can 5 children be arranged in a line such that two of them, Kajal and Sanmay, are always together? * 1/1

- ○ 2! x 3!
- ○ 5! x 2!
- ◉ 2! x 4! ✓
- ○ 3! x 4!

✓ 1680 six digit telephone numbers can be constructed with the digits 0, 1, 2, 3, 4, 5, 6, 7, 8, 9 if each number starts with 35 and no digit appears more than once. * 1/1

- ◉ True ✓
- ○ False

In simple language explain how you decided the answer for the above question *

total number of paces are 6, now we have fixed first 2 digits. now 4 places are left and 8 numbers are left, so possible numbers are 8P4 i.e. 8!/4! = 8*7*6*5 = 1680

✓ 8 students are participating in a race. In how many ways can the first three prizes be won? * 1/1

- 720 ways
- 336 ways ✓
- 512 ways
- 24 ways

✓ Find the total number of permutations of the letters of the word INSTITUTE. * 1/1

- 63120
- 30240 ✓
- 42080
- 126240

✓ In how many ways can the letters of the word CONSTANT be arranged so that the relative position of the vowels and consonants is not changed? * 1/1

- 360 ✓
- 256
- 444
- None

In how many ways can the letters of the word ARRANGE be arranged so that all the R's are never together? *

900