In how many ways can the word "TOPO" be arranged?
a. 12 ways b. 15 ways c. 18 ways d. 21 ways

Solution

The rule for repeated objects is

$$\frac{n!}{m!\,p!\dots q!}$$

where n is number of letters in the word, m – number of repeats of the first letter, …, q - number of repeats of the last letter.

So we get

$$\frac{4!}{2!} = 12.$$

Answer: a. 12 ways.