

Name _____

Date _____

Permutations - Step-by-Step Lesson

How many different combinations of management can there be to fill the positions of president, vice-president and treasurer of a tennis club knowing that there are 16 eligible candidates?



Explanation:

The can be identified as a Permutation because the order does matter:

Since order does matter, use the permutation formula.

$$C(16,3) = \frac{n!}{(n-r)!} = \frac{16!}{13!} = \frac{20,922,789,888,000}{6,227,020,800}$$

$$C = 3,360$$

There are 3,360 ways to arrange 16 items taken 3 at a time when order does matter.

