Math

Initial post

Combinations and permutations are studies at the same time because they have some relevance. Orders in combinations don't matter and they involve the collection of objects. Repetition is not possible in combinations. If we select four people from a group consisting of 20 people. As orders don't matter so the name will be of no importance and we will be referring to the same group. A permutation problem is handled differently compared to combinations. In solving the problem it is important to determine if repetition is allowed or not. If we have to arrange the letter D, E, F the arrangement of D, E, F and D, F, E is the same in combinations because its order does not matter. In permutations, the order is considered. If there are 4 swimmers and the coach needs to take them at 3 times the formula allows to use them in 2 different ways.

C (4,3) = P(4,3)/ 3

= 4 x 3/ 3 x 2 x 1 = 2

Replies

I like the post of Scott Manuel because he has managed to provide clear explanations of permutations and combinations. A combination can be seen as a distinct group of objects irrespective of their arrangements. I agree that in real life we all use combinations at different places but still we able unable to realize. I like the example used in the post for elaborating the concept. The calculations allow Manuel to estimate 120 possibilities.

I like the post of Bethany Rogers for providing deeper elaboration of the mathematical concepts. I agree that the arrangements hold no significance in defining a combination problem. I like the example provided by Rogers because it proves that combinations can be used in real life more often. I agree that these mathematical concepts are not limited to the studies but it can be integrated into all aspects of life including social and economic aspects.