

NAME

QUARTER

GRADE & SECTION

DATE

Activity: **Permutations and Combinations**

I. Evaluate.

- | | |
|--|--------------------------------------|
| 1. ${}_{12}P_3 =$ <input type="text"/> | 6. ${}_9C_1 =$ <input type="text"/> |
| 2. ${}_{12}C_3 =$ <input type="text"/> | 7. ${}_9P_9 =$ <input type="text"/> |
| 3. ${}_{20}P_2 =$ <input type="text"/> | 8. ${}_9C_9 =$ <input type="text"/> |
| 4. ${}_{20}C_2 =$ <input type="text"/> | 9. ${}_9P_0 =$ <input type="text"/> |
| 5. ${}_9P_1 =$ <input type="text"/> | 10. ${}_9C_0 =$ <input type="text"/> |

II. Set up a notation in the form of ${}_nP_r$ or ${}_nC_r$ then find the number of possibilities .

1. Selecting which ten players will be in the relay game on a 15 persons team.

Set up:

Therefore, there are different ways of selecting ten players that will be in the relay game from a 15 persons team.

2. Kelly is setting the a four-digit lock. He is considering of different ways to use the digits 2, 4, 1, 3, and 8.

Set up:

Therefore, there are different ways to use the digits 2, 4, 1, 3, and 8 in a four-digit lock.

3. There are 25 applicants for five IT expert positions.

Set up:

Therefore, there are different ways of selecting five from 25 applicants.

4. A team of 13 volleyball players needs to choose a captain and co-captain.

Set up:

Therefore, there are different ways of choosing a captain and co-captain from a team of 13 volleyball players.

How many attempts? ____.
How well did you do?



Need help!



Just OK!



Splendid

I FEEL THAT...