

NAME QUARTER GRADE & SECTION DATE **Activity: Combination**

COMBINATIONS An arrangement or listing in which order is not important is called a **combination**. For example, if you are choosing 2 salad ingredients from a list of 10, the order in which you choose the ingredients does not matter.

Combinations of n Objects Taken r at a Time

The number of combinations of r objects taken from a group of n distinct objects is denoted by ${}_nC_r$ and is given by this formula:

$${}_nC_r = \frac{n!}{(n-r)! \cdot r!}$$

Set up the formula then find the combinations of n objects taken r at time.

1. How many different committees of 4 people can be formed from a pool of 7 people?

This is the combination of objects taken at a time.

That will be C = $\frac{\text{!}}{(\text{} - \text{})! \cdot \text{}!$

Therefore, there are different committees of 4 people that can be formed from a pool of 7 people.

2. In how many ways can Tony choose three books from a list of 8 books?

This is the combination of objects taken at a time.

That will be C = $\frac{\text{!}}{(\text{} - \text{})! \cdot \text{}!$

Therefore, there are ways that Tony can choose three books from a list of 8 books.

3. In how many ways can be a coach select the first five from 12 players?

This is the combination of objects taken at a time.

That will be C = $\frac{\text{!}}{(\text{} - \text{})! \cdot \text{}!$

Therefore, there are ways that a coach can select the first five from 12 players.

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



Need help!



Just OK!



Splendid

I HAVE TO...