

8A.8 Learning Opportunity

Name: _____

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



For each word problem consider why the order does not matter. Because the order does not matter, these are combinations rather than permutations.

1. Nineteen telephones may be paired for conversations in how many ways?
2. How many ways can a doubles team be selected from 8 players?
3. How many ways can a club of 6 members choose a committee of 3 people?
4. How many ways can 3 people be chosen from 4 couples if all are equally eligible?
5. How many ways can a reader select 3 books from 5 different books?
6. How many pairs of friends may be chosen from among 6 friends?
7. How many triangles may be formed selecting 3 of 7 points on a circle as the vertices?
8. How many quadrilaterals may be formed selecting 4 of 6 points on a circle as the vertices?