

Name \_\_\_\_\_

Section \_\_\_\_\_

Due: 10/30/12

**9-6 Combinations & Permutations worksheet**

*Evaluate.*

1)  ${}_n C_n$

2)  ${}_n C_1$

3)  ${}_n C_0$

4)  ${}_7 C_2$

5)  ${}_9 C_6$

*Determine whether to use a combination or a permutation. Then solve the problem.*

6) How many ways can a softball coach choose the first, second, and third batters in the lineup for a team of 9 players?

7) How many teams of 3 people can be made from 6 employees?

8) In how many ways can 6 people line up to get on a bus?

9) If 10 students go hiking in pairs, how many different pairs of students are possible?

10) Levi is making a salad. He can choose from the following toppings: carrots, cheese, radishes, cauliflower, broccoli, mushrooms, and hard-boiled eggs. If he wants to have 5 different toppings, how many possible salads can he make?