Quiz 12.1 and 12.2 Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Probability and Statistics Hour \_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_

 You may use your notes to help you. **Show all work.**

1. If there are 15 seniors on the soccer team. How many ways can we choose a Captain and a Co-Captain? (They can not be the same person)
2. How many possible outcomes are there when 5 coins are tossed?
3. License plates will consist of 4 letters and 2 digits. Repetition is allowed. How many plates are possible?
4. A restaurant meal consists of an appetizer, entrée and dessert. If there are 4 appetizers, 10 entrees and 3 desserts, answer the following questions.
5. How many meals are possible if you must chose one of each item?
6. How many meals are possible if you can omit one menu item (like no dessert).
7. A combination for a school locker consists of 3 numbers, using the numbers from 0-49. How many different combinations are possible if you cannot repeat a number?
8. How many 3-person committees can be formed from a set of 15 people?
9. Professor Phillips teaches an advanced Statistics class with 20 students. She has a visually challenged student , Jada, who must sit in the front row next to Susie. There are **7** chairs in the first row of her classroom. How many different ways can Professor Phillips assign students to sit in the first row?
10. How many 4 digit numbers can be made if the number must be **odd** and **greater than 7000** and digits can be repeated?
11. Professor Phillips and her statistics class are back, she now has to figure how many ways her first row can be assigned if there are no restrictions on seating.
12. A pair of regular dice are rolled. List all of the possibilities of rolling a total of 6.