1.) How many different permutations are there of the letters in the word "Pogonotrophy"?

2.) How many ways can you get three of a kind (for example, 3 queens and 2 other different cards) in a 5-card poker hand?

3.) How many ways can you get three pairs (for example, 2 kings, 2 nines, and 2 sevens) in a 6-card poker hand?

4.) A committee of 10 is to be formed from 7 girl and 9 boy middle school students. How many different ways can this be done if there must be at least 5 girls on the committee?

5.) How many ways can you get from point A to point B in the following grid if you can only go "up" or "left"?