Permutations and Combinations

1. How many three digit numbers can you make by arranging the numbers 5, 6, and 9?	2. How many permutations can you make from the letters Q, W, M, and H?
3. How many three person committees can be chosen from a group of eight people?	4. There are ten players on the basketball team. How many ways can a starting lineup of five players be chosen?
5. How many ways can a president and vice-president be selected in a class of sixteen students?	6. There are 4 things in a hat. How many ways can you pick 2 things from the hat at once?
7. There are 7 things in a hat. How many ways can you pick 5 things from the hat at once?	8. Timothy, Kylie, and Nathan ran in a race. In how many different orders can they finish the race?
9. How many four person committees can be chosen from a group of nine people?	10. In how many ways can Michael, Amber, Matthew, Kyle, Victoria, and Katherine stand in line?
11. How many combinations of four letters are possible from the letters D, F, X, H, and K?	12. How many permutations can you make from the letters M, I, and F?
13. How many permutations can you make from the letters A through H?	14. How many two person committees can be chosen from a group of seven people?
15. Christopher, Nathan, Isaac, and Destiny ran in a race. In how many different orders can they finish the race?	16. How many four person committees can be chosen from a group of six people?
17. In how many ways can Jordan, Christina, William, Kayla, and Devin stand in line?	18. There are 4 things in a hat. How many ways can you pick 1 thing from the hat at once?
19. How many six digit numbers can you make by arranging the numbers 8, 6, 5, 4, 3, and 1?	20. There are 6 things in a hat. How many ways can you pick 3 things from the hat at once?