Math 1 Permutation Practice Worksheet

1. Compute: a) 5P_3 b) 6P_4 c) 10P_6

2. Find the number of ways 4 members from a family of 5 can line up for a photo shoot.

3. In how many ways can letters of the set {R, S, T, U} be arranged to form ordered codes of 2 letters? (no letters are repeated)

4. A license plate begins with 3 letters. If the possible letters are A, B, C, D and E, how many different permutations of these letters can be made if no letter is used more than once?

5. In how many ways can a president, a treasurer and a secretary be chosen from among 7 candidates?

6. A teacher wants to write an ordered 6-question test from a pool of 10 questions. How many different forms of the test can the teacher write?

7. Twelve skiers are competing in the final round of the Olympic freestyle skiing aerial competition. In how many different ways can 3 of the skiers finish first, second, and third to win the gold, silver, and bronze medals?

8. You are considering 10 different colleges. Before you decide to apply to the colleges, you want to visit some of all of them. In how many ways can you visit 6 of the colleges? In how many ways can you visit all 10 colleges?

Find the number of permutations of the letters of these words.