

Name _____

Section _____

Due: Monday, 10/29/12

Permutations Word Problems

A permutation is when _____ is important.

Decide whether the word problem below could be solved using a permutation. If it can, solve it. If it cannot, write "Not a permutation".

- 1) You have 5 new books you want to read. In how many different orders can you read the books?

- 2) Judges at a marching band competition are awarding prizes to the first-, second-, and third-place finishers. The competition has 11 marching bands. What's the probability that your band finishes first and your rival's band finishes second?

- 3) A frozen yogurt stands sells 14 flavors. How many different flavored combinations of 2 scoops of frozen yogurt could you get?

- 4) You are planning a flower garden with 3 rows. Each row will have one type of flower, and none of the rows will be the same. You have 8 types of flowers that you can choose from. Find the number of different rows of flowers.

- 5) The combination for a lock consists of the numbers 2, 3, 5, and 7. You don't remember the order in which the four numbers are to be entered. Find the probability that you open the lock on the first try.

- 6) A key-pad has a 4-digit password. The password will be accepted so long as the digits are correct, but they do not need to be entered in any particular order. What's the probability that you correctly enter the password on the first try?