

Name _____

Date _____

Worksheet G2: Mixed Combinatorics

Decide if the problem is an example of a permutation or combination. Then evaluate each one. Show proper notation, and your work.

1. How many teams of 4 horses would be made if there were 9 horses in the stable?
2. A lock manufacturer uses the numbers 1 - 30 in its combinations. How many different combinations for the lock are there if it uses 3-number combinations?
3. Mike has nine baseball trophies to arrange on the shelf. How many different ways can they be arranged?
4. In math class, there are 24 students. The teacher picks 4 students to help do a demonstration. How many different groups of 4 could she have chosen?
5. In how many ways can 10 people wait in line for concert tickets?
6. The teacher has listed 30 books as book report options. You must read 5. How many different sets of 5 books could you have chosen to read?
7. How many different ways are there to purchase 2 CD's, 3 DVD's and 1 set of headphones if there are 7 CD titles, 5 DVD titles, and 3 types of headphones available?