

Lab for Sections 13.3

Use good notation and show appropriate work.
State your solutions to problems in complete sentences.

Name _____

1. Evaluate each of the following.

(a) $9! =$

(c) $P(9, 3) =$

(b) $\frac{9!}{3!4!} =$

(d) ${}_9C_3$

2. How many different ordered arrangements can be formed on a shelf with space for 3 books if there are 6 different books available?

3. How many distinct hands consisting of five hearts and eight spades can be formed from a standard deck of cards?

4. A station wagon has 8 seats (plus the driver's seat). In how many ways can five passengers be seated in the eight seats?

5. In how many ways can a little league coach make out a batting order consisting of 9 players if there are 12 players on the team?

