

Last name _____

First name _____

LARSON—MATH 350—CLASSROOM WORKSHEET 02
Counting (Multiplication Principle).

1. Alice sits at a fixed spot of a round table. There are 5 other chairs around the table. How many ways are there to seat the 5 other guests?
2. How many ways are there to seat the 6 guests if Alice's spot isn't fixed?
3. A lottery ticket consists of a choice of 5 different numbers from 90 possible numbers. How many different choices are possible?
4. In a hand of bridge each player is dealt 13 cards from a 52 card deck (where all 52 cards are different). How many different hands are possible?

5. 3 chessboards are set up at the party. How many ways are there to match up the 6 guests to play 3 simultaneous chess games?

The Language of Sets

Let $A = \{7, 8, 10, 11\}$, $B = \{a, b, c\}$.

6. Find $|A|$.
7. Find $|B|$.
8. Find $A \times B$.
9. Find $B \times A$.
10. True or False: $A \subseteq B$.
11. Find any subset of A .