Last name _____

First name _____

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

1. 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?

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

3. Find $|A|$.

4. Find $|B|$.

5. Find $A \times B$.

6. Find $B \times A$.

Now let $A = \{7, 8, 10, 11\}$, $B = \{2, 3, 7\}$

7. True or False: $A \subseteq B$.

8. Find any subset of A.

9. Find $A \cup B$.

10. Find $|A \cup B|$.

11. Find $A \cap B$.

12. Find $|A \cap B|$.

13. True or False: $|A \cup B| = |A| + |B| - |A \cap B|$.

14. Find $A \setminus B$.

15. Find $B \setminus A$

16. True or False: $A \setminus B = B \setminus A$.

17. Find $A \triangle B$.