

## Math 114 (Sets Assignment 2)

Use the following sets to answer the following questions.

$$U = \{1,2,3,4,5,6,7,8\}: A = \{1,3,4,5\}: B = \{4,5,7,8\}: C = \{1,3,5\}$$

- 1) Find  $A \cup B$
- 2) Find  $A \cap B$
- 3) Find  $n(A)$
- 4) Find  $n(B)$
- 5) Find  $A'$
- 6) Find  $B'$
- 7) Find  $A \cap C$
- 8) Are the sets  $A$  and  $B$  equivalent?
- 9) Are the sets  $C$  and  $B$  equivalent?
- 10) List all subsets of  $C$
- 11) Construct a Venn Diagram for sets  $A, B$ , and  $U$

### Subsets

- 12) List all subsets of  $\{10,20,30\}$
- 13) How many subsets does a set with 20 elements have?
- 14) Given an example of two sets that are equivalent.