

Math 114**Sets (Union and Intersection)**

I) Let $A = \{a, b, c, d, e, f\}$, $B = \{b, d, f, h\}$, $C = \{a, b, c\}$, $D = \{e, f, g, h, i\}$

- 1) Find $A \cup B$
- 2) Find $A \cap B$
- 3) Find $A \cup C$
- 4) Find $A \cap D$
- 5) Is $C \subset A$?
- 6) Is $B \subset A$?

II) Let $A = \{2, 4, 8, 10, 12\}$, $B = \{3, 5, 7, 9, 11\}$, $C = \{7, 9, 11\}$, $D = \{1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12\}$
 $U = \{1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12\}$

- 7) Find $A \cup B$
- 8) Find $A \cap B$
- 9) Find $A \cup D$
- 10) Find $A \cap D$
- 11) Draw a Venn Diagram using sets A, B, and U