

# Section 2.5 Review Sept. 5, 2012

## Logical Operators

AND intersection common (overlap)  $\cap$

OR union take everything  $\cup$

examples:

$$A = \{1, 2, 3, 4, 5\}$$

$$B = \{1, 3, 5, 7\}$$

$$C = \{2, 4, 6, 8\}$$

$$* A \cup B = A \text{ or } B$$

$$\{1, 2, 3, 4, 5, 7\}$$

$$* A \cap B = A \text{ and } B$$

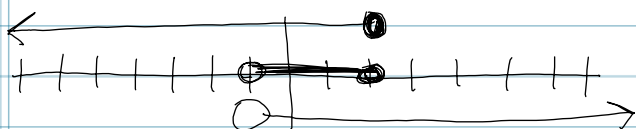
$$\{1, 3, 5\}$$

$$* B \cap C = B \text{ and } C = \emptyset$$

empty set

$$* x \leq 2 \text{ and } x > -1$$

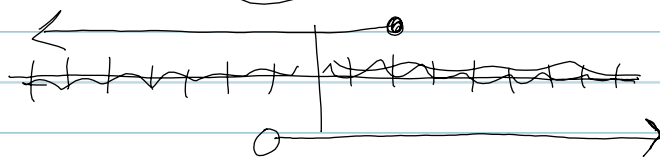
Common



$$(-1, 2]$$

$$x \leq 2 \text{ or } x > -1$$

everything

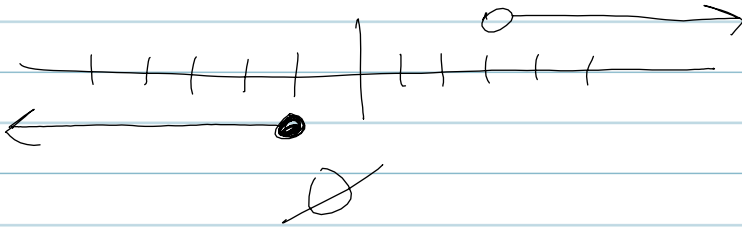


$$(-\infty, \infty)$$

$\mathbb{R}$

$$x > 3 \quad \text{and} \quad x \leq -1$$

↓  
Common



$$x > 3 \quad \text{or} \quad x \leq -1$$

