

# WELCOME TO PRECALC

## SET NOTATION

$\in$  is an element of

$$U = \{0, 1, 2, 3, 4, 5, 6\}$$

$$A = \{1, 3\} \quad D = \{2, 4, 6\}$$

$$B = \{0, 2, 4, 6\} \quad E = \{0\}$$

$$C = \{4, 5, 6\}$$

$$3 \in A \quad \text{True}$$

$$0 \in D \quad \text{False}$$

$$3 + 5 \in C \quad \text{False}$$

$\subset$  subset

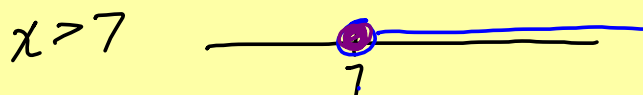
$$D \subset B \quad \text{True}$$

$$E \subset C \quad \text{False}$$

OR  $\cup$  union  $C \cup D = \{2, 4, 5, 6\}$

AND  $\cap$  intersection  $C \cap D = \{4, 6\}$

# INTERVAL NOTATION



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$(3, 8]$



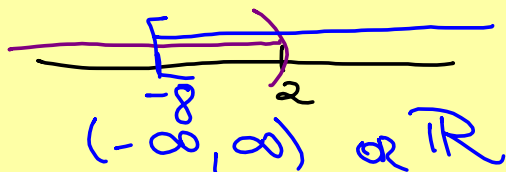
$(7, \infty)$



$[7, \infty)$

$(-\infty, 3]$

$(-\infty, 2) \cup [-8, \infty)$



$(-\infty, \infty) \in \mathbb{R}$

$(-\infty, 2) \cap [-8, \infty)$

$[-8, 2)$