

Sets: $A = \{a, b, c\}$, $B = \{c, d\}$

$A \cup B = \{x \mid x \in A \text{ OR } x \in B\} = \{a, b, c, d\}$
 union, OR

$A \cap B = \{x \mid x \in A \text{ AND } x \in B\} = \{c\}$
 Intersection, AND

$A = (-\infty, 7]$, $B = [5, \infty)$, $C = (11, \infty)$

