

Welcome To PRECALC

SET NOTATION

\in is an element of

$$\left. \begin{aligned} U &= \{0, 1, 2, 3, 4, 5, 6\} \\ A &= \{1, 3\} & D &= \{2, 4, 6\} \\ B &= \{0, 2, 4, 6\} & E &= \{0\} \\ C &= \{4, 5, 6\} \end{aligned} \right\}$$

$$3 \in A \quad T$$

$$0 \in D \quad F$$

$$3+5 \in C \quad F$$

\subset Subset

$$D \subset B \quad T$$

$$E \subset C \quad F$$

INTERVAL NOTATION

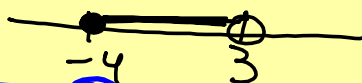
$$x > 7$$



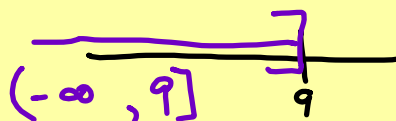
$$(7, \infty)$$

$[$ = \bullet \leftarrow closed circle \leftarrow can = the endpoint
 $($ = \circ \leftarrow open circle \leftarrow cannot = the endpoint

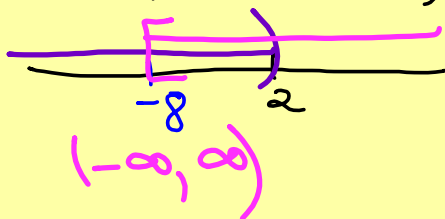
$$[-4, 3)$$



$$x \leq 9$$



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



\cup = Union = OR

\cap = intersection = AND

If above problem were an Intersection (\cap), the solution is $[-8, 2)$.

$$(-1, \infty) \cap [-1, 40)$$

Solution: $(-1, 40)$

