Form	Set Builder Notation	Interval Notation	Graph
$x < 1$	$\{x \mid x < 1\}$	$(-\infty, 1)$	⟵⟶ 1
$x \leq 2$	$\{x \mid x \leq 2\}$	$(-\infty, 2]$	⟵⟶ 2
$x > 5$	$\{x \mid x > 5\}$	$(5, \infty)$	⟵⟶ 5
$x \geq 10$	$\{x \mid x \geq 10\}$	$[10, \infty)$	⟵⟶ 10
$1 < x < 2$	$\{x \mid 1 < x < 2\}$	$(1, 2)$	⟵⟶ 1 2
$3 < x \leq 4$	$\{x \mid 3 < x \leq 4\}$	$(3, 4]$	⟵⟶ 3 4
$7 \leq x < 10$	$\{x \mid 7 \leq x < 10\}$	$[7, 10)$	⟵⟶ 7 10
$11 \leq x \leq 12$	$\{x \mid 11 \leq x \leq 12\}$	$[11, 12]$	⟵⟶ 11 12

1. $[-2, 5)$ $\{x \mid -2 \leq x < 5\}$ ⟵⟶ -2 5

2. $(-\infty, 4)$ $\{x \mid x < 4\}$ ⟵⟶ 4

3. $(-5, 2) \cap [-3, 4]$

" INTERSECTION "
" AND "
GRAPHWISE : WHERE THEY
ARE BOTH SHADED

4. $(-5, 2) \cup [-3, 4]$

" UNION "
" OR "
GRAPHWISE : WHERE ANYTHING
IS SHADED

-5 -4 -3 -2 -1 0 1 2 3 4

$[-3, 2)$

$(-5, 4]$