

Inequality vs. Interval Notation

Each row below is an equivalent set:

Inequality Notation	Interval Notation	Graph
$x \geq 3$	$[3, \infty)$	
$x < 3$	$(-\infty, 3)$	
$x \neq 3$	$(-\infty, 3) \cup (3, \infty)$	

1. Rewrite each inequality set using interval notation.

a) $x \leq 0$ b) $0 < x < 7$ c) $x \neq 7$

2. Rewrite each interval notation set using inequalities.

a) $(3, 10]$ b) $[8, \infty)$ c) $(-\infty, 0) \cup (0, 1) \cup (1, \infty)$

3. Use the graph to describe the set of all x values where $f(x) > 0$.

Write in interval notation and using inequalities.

