

# Inequalities and Their Graphs

Determine whether each number is a solution of the inequality

1)  $3x + 1 \geq 10$

a) 5

$$3(5) + 1 \geq 10$$

$$15 + 1 \geq 10$$

$$16 \geq 10 \checkmark$$

b) 3

$$3(3) + 1 \geq 10$$

$$9 + 1 \geq 10$$

$$10 \geq 10 \checkmark$$

c) 0

$$3(0) + 1 \geq 10$$

$$0 + 1 \geq 10$$

$$1 \geq 10 \times$$

Therefore 5 and 3 are solutions and 0 is not a solution.

Graph each inequality.

2)  $x > -2$



3)  $-8 \geq m$



4)  $y \geq 10$



5)  $n \leq -25$

