

Worksheet on Inequalities**Name:** _____

1. Graph each of the following inequalities on a number line and express each in interval notation.

a) $1 < x < 7$

b) $x \geq -4$

c) $x < -2$ or $x \geq 5$

d) $x < -2$ and $x \geq -4$

2. Solve these inequalities: (Represent the solutions using both inequality and interval notation; and graph them on a number line.)

a) $3x+1 \geq -5$

b) $4x+2 \geq 7x+11$

c) $6-5x \leq 16$

d) $6x-1 > 3x-11$