

## Math 90 Inequality Quiz

1. Graph the following inequalities.

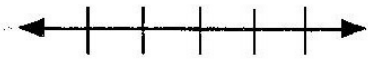
a)  $x \leq 5$



b)  $y \geq 9$



c)  $m < -3$



d)  $n > -1$



e)  $x \neq 7$



f)  $-2 \leq x \leq 8$



g)  $y \leq -4$  or  $y \geq 9$



h)  $-\frac{7}{4} \leq g < -\frac{3}{4}$



2. Solve and verify the inequalities.

a)  $2x - 7 \geq 11$

b)  $0.5x - 0.3 \leq 0.7x - 1.1$

(8)

3. Solve and graph the inequalities.

a)  $-3(y - 4) < -9$

b)  $\frac{3}{4}y + \frac{1}{2} < \frac{y}{2} - 5$

(6)



4. The length of a rectangle is  $5x + 3$  cm and the width is  $3x + 2$  cm. The sides of an equilateral triangle are  $4x + 7$  cm. Determine the values of  $x$  where the perimeter of the rectangle will be more than the perimeter of the triangle. Verify your answer.

(3)