MAT 171 - Section 1.7: Homework
Read sections 1.7, 1.4, and 1.5, Complete all MyMathLab exercises

Express each interval in interval notation,set-builder notation, and graph the interval on a number line.

Interval and Inequality Notation			
Inequality	Interval	Set-Builder	Graph
$(1, 6]$			
$[-5, 2)$			
$[-3, 1]$			
$(2, \infty)$			
$(-\infty, 5.5)$			

In the following exercises, other than no solution ($\emptyset$), use interval notation to express solution sets and graph each solution set on a number line. Solve each linear inequality, compound inequality, or absolute value/inequality

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1) $3x - 7 \geq 13$

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2) $-9x \geq 36$

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3) $4(x+1)+2 \geq 3x+6$

4) $\frac{x}{4} - \frac{3}{2} \leq \frac{x}{2} + 1$

5) $5(x-2) - 3(x+4) \geq 2x - 20$

6) $-3 \leq x - 2 < 1$

7) $-11 < 2x - 1 \leq -5$

8) $|x| = 7$

9) $|2x - 1| = 5$

10) $2|3x - 2| = 14$

11) $|x + 1| + 5 = 3$

12) $|x - 1| \leq 2$

13) $|2x - 6| < 8$

14) $|3x - 8| > 7$

15) $-4|1 - x| < -16$