Precalculus - Mr. C. - *All Work on Looseleaf* Name_____

Q1 HW3

Date_____ Period_____

Write the slope-intercept form of the equation of the line through the given points.

1) through: $(2, -3)$ and $(2, -4)$

2) through: $(-5, 4)$ and $(-1, -2)$

Write the slope-intercept form of the equation of the line described.

3) through: $(1, -5)$, parallel to $y = 3x + 1$

4) through: $(5, 1)$, parallel to $y = -\frac{3}{5}x + 5$

5) through: $(5, -5)$, perp. to $y = \frac{1}{5}x + 5$

6) through: $(5, -2)$, perp. to $y = \frac{9}{7}x - 5$

Sketch the graph of each line.

7) $x = -3$

8) $5x - 2y = -4$

Sketch the graph of each linear inequality.

9) $y > -3x + 4$

10) $y < -x + 3$

11) $2x - y > 1$

12) $x + 3y \leq 3$

13) $x + 4y \geq 12$

14) $2x + y < -5$

15) $2x + 3y > 12$

16) $8x - 3y \geq 9$