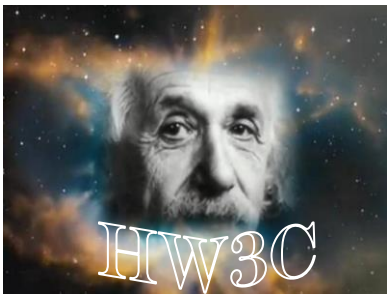
Graph the following inequalities.



1) $y \geq x$

2) $y \leq 2x - 1$

3) $3x + 4y < 12$

4) $y \leq x^2$

5) $y > x^2 + 4x + 8$

6) $y < 2x^2 - 4x + 1$

7) $0 \leq x \leq 2$

8) $-1 < y < 3$

9) $|y| \geq 1$

10) $2 < |x + 4| < 3$

Sketch the graph of the given inequality. The vertical axis does not need to be accurate.

11) $y > x^3 - 9x$

12) $y < x^4 - 5x^2 + 4$

Graph the following systems of inequalities.

13) $x \geq 0$
$x + 2y \leq 4$

14) $y \leq 1$
$3x - 2y \leq -6$

15) $y \geq x^2 - 2$
$y < x$

16) $y < x^2 + x - 2$
$y \leq -x^2 + x + 12$

17) $0 \leq x \leq 3$
$0 \leq y \leq 2$
$y \leq 2 - x$

18) $|x| > 2$
$|y| \leq 4$

You will need to see Mr. Paull for any and all graphs from this assignment!