GRAPHING INEQUALITIES

Can you color inside the lines? Then you can graph inequalities!

DETAILS, DETAILS...

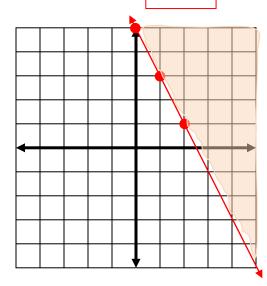
- 1) Make sure the "y" or "f(x)" is first in your answer, then... shade above the line for > or \ge , shade below the line for < or \le
- 2) Solid lines for ≥ or ≤ (because of the equal to) dashed lines for > or <</p>

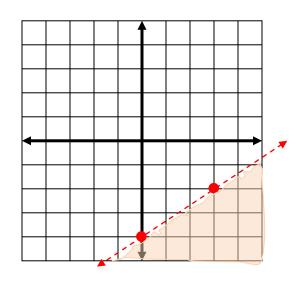
Graph the following inequalities.

1) $f(x) \ge -2x + 5$

slope = -2, y-int. = 5 2) $y < \frac{2}{3}x - 4$

slope = 2/3, y-int. = -4

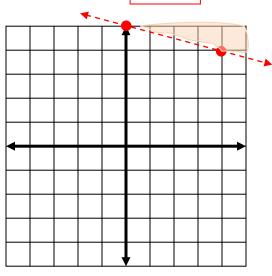


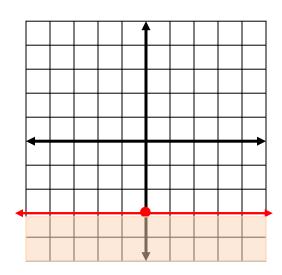


3) x + 4y > 20

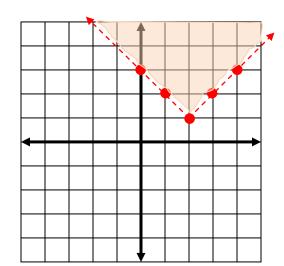
4y > -x + 20y > -x/4 + 5 4) $1-2y \ge 7$

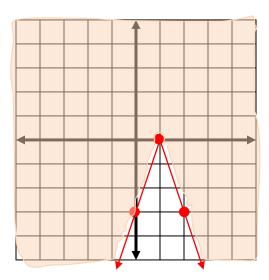
-2y <u>></u> 6 y <u><</u> -3





6)
$$y \ge -3 | x - 1 |$$





What happens if there is no "above or below" to shade?

7)
$$\frac{3}{2}x < -6$$

Solve for x first by mult. both sides by 2/3 x < -4 No "y" means a vertical line @-4

