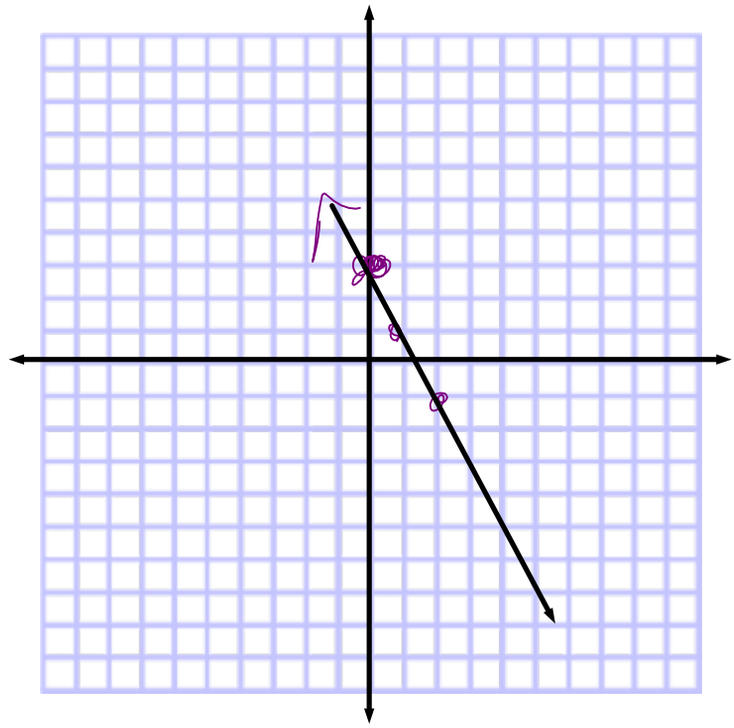
Bell Work

Graph

$y = -2x + 3$



Two-Variable Inequalities

**Graph each inequality.**

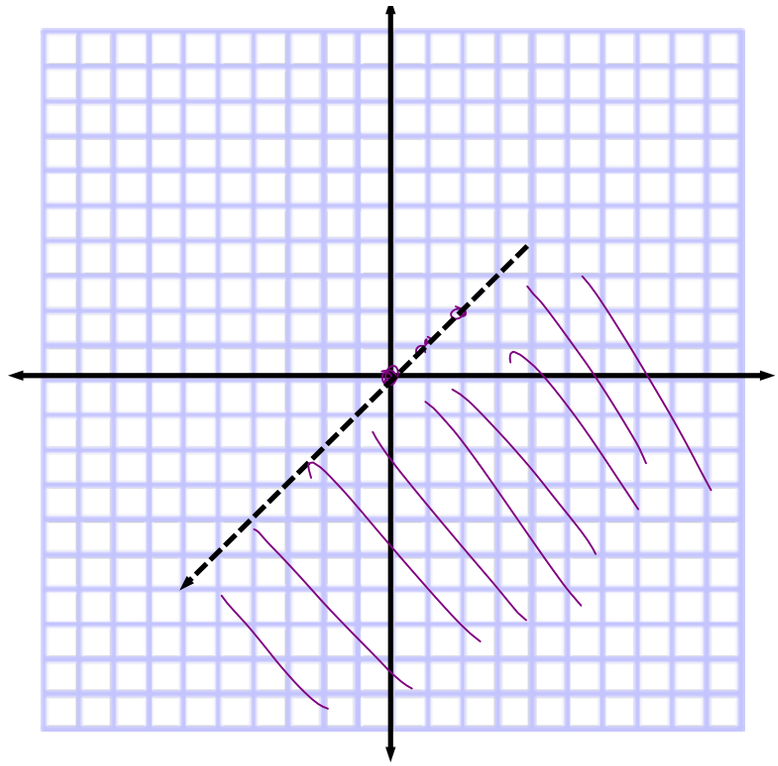
1. $y \leq x$

1) slope = $\frac{1}{1}$

2) y-int = 0

3) dashed

4) below



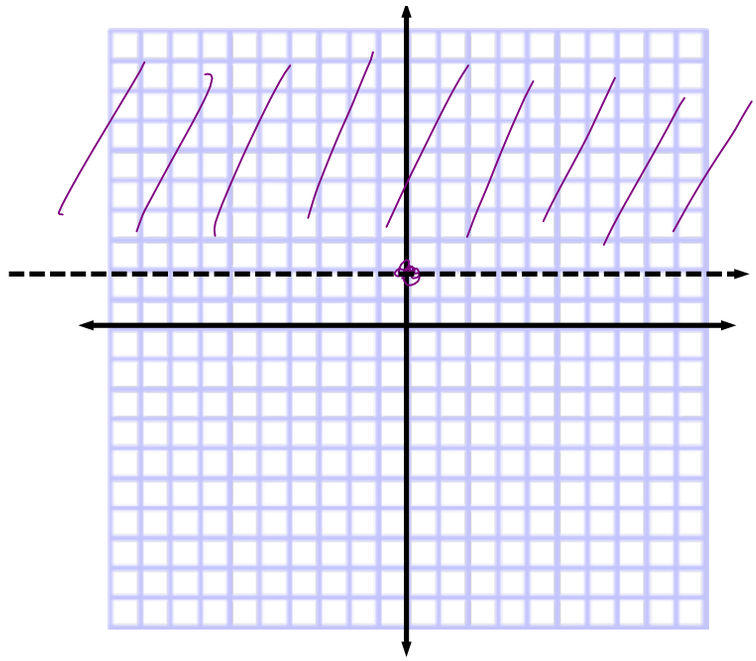
2 3. $y > 2$

slope = 0

y-int = 2

dashed

above



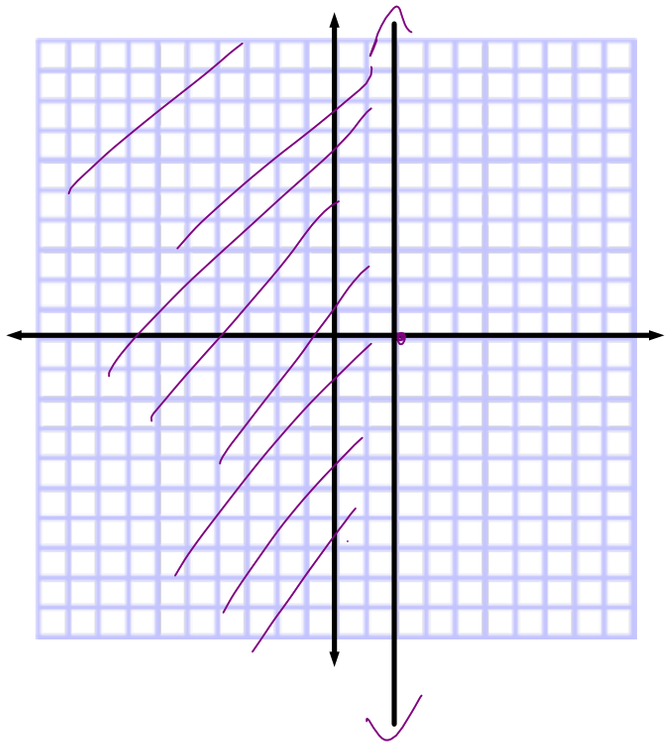
3 5. $x \leq 2$

slope: undefined

y-int: none

(when y is missing)

solid



7. $-2x - y \geq 1$

$+2x \quad +2x$

$-y \geq 2x + 1$

$\frac{-y}{-1} \geq \frac{2x}{-1} + \frac{1}{-1}$

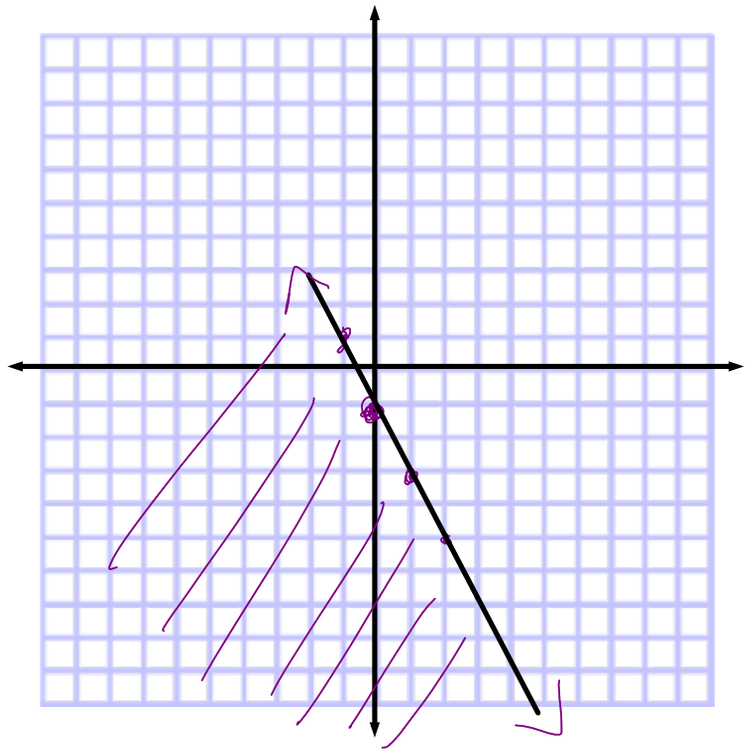
$y \leq -2x - 1$

slope: $\frac{-2}{1}$ $\frac{\text{down}}{\text{right}}$

y-int: $-1$

solid

below



5a

9. You have a $25 calling card. Calls made using the card within the United States cost $.10 per minute while calls made from the US to France cost $.25 per minute.

a. Write an inequality that relates the number of minutes $x$ you can use for calls within the U.S. and the number of minutes $y$ you can use for calls from the U.S. to France.

b. Graph the inequality.

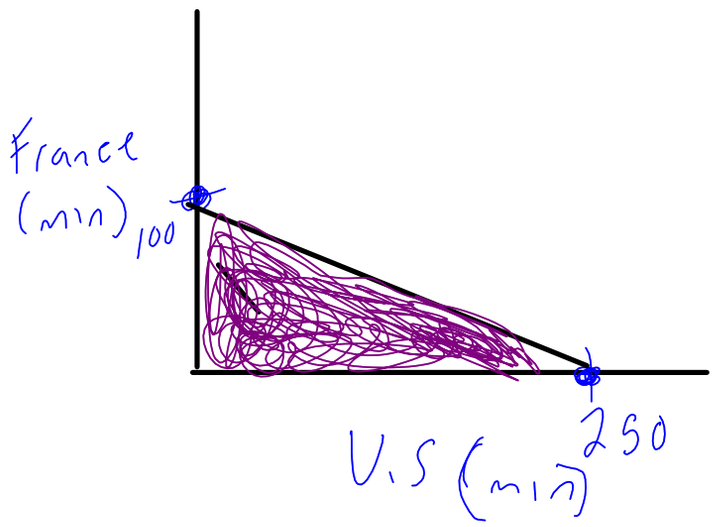
$.10x + .25y \leq 25$

$\frac{.10x}{.10} \leq \frac{25}{.10}$

$x \leq 250$ min

$\frac{.25y}{.25} \leq \frac{25}{.25}$

$y \leq 100$ min



**Graph each absolute value inequality.**

6

11. $y > |x + 2|$

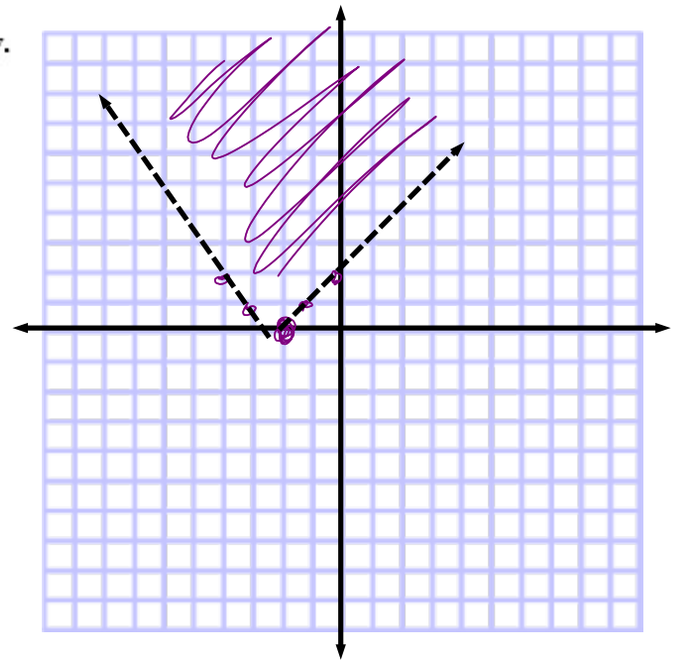
vertex

(-2, 0)

slope = $\frac{1}{1}$

dashed

above the vertex



13. $y > |x| + 2$

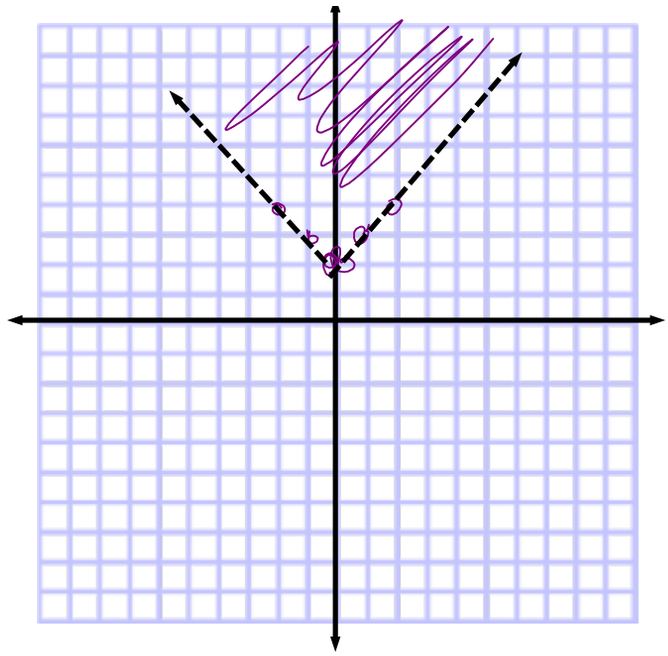
vertex

(0, 2)

slope = $\frac{1}{1}$

dashed

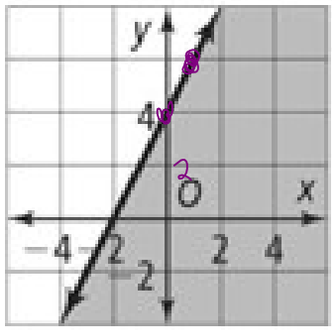
above



**Write an inequality for each graph. The equation for the boundary line is given.**

8

15. [illegible]




slope $\frac{2}{1} = 2$

y-int = 4

$y \leq 2x + 4$

**Graph each inequality on a coordinate plane.**

9) $y > -\frac{1}{6}x - 1$

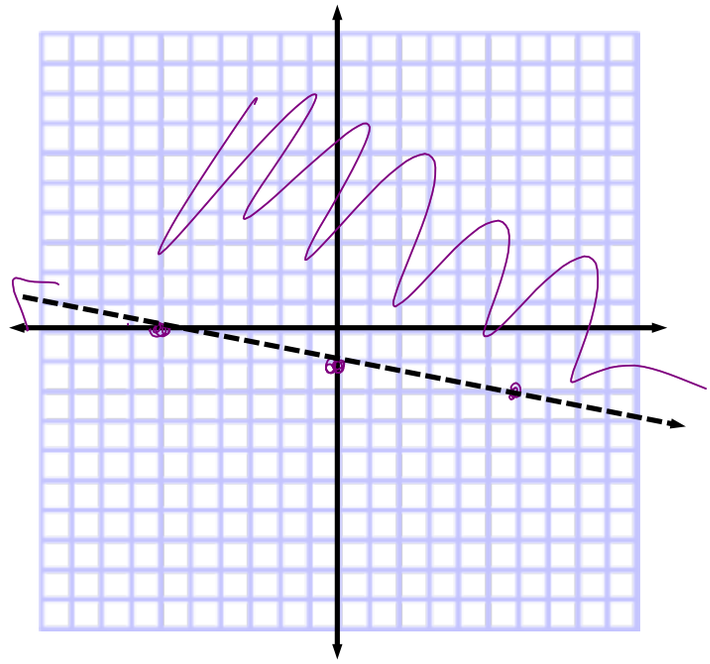
$y > -\frac{1}{6}x - 1$

slope $= -\frac{1}{6}$

y-int $= -1$

dashed

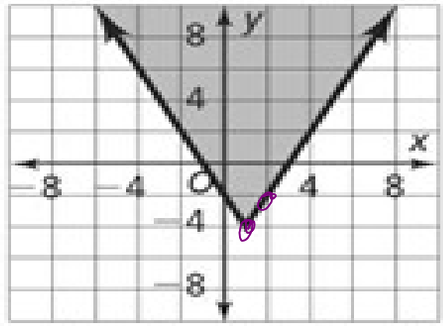
above



**Write an inequality for each graph.**

10)

**10.**




vertex (1, −4)

slope $\frac{2}{1} = 2$

$y \geq 2|x-1|-4$