

1. When would the boundary line of the graph of a linear inequality be dashed?

$<$ $>$

When would it be solid?

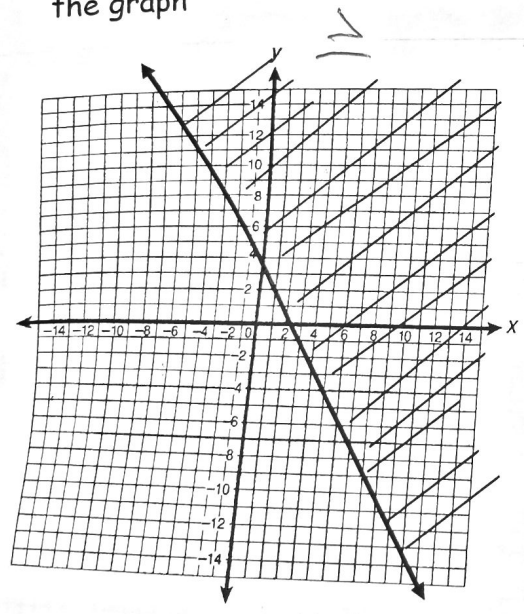
\geq \leq

2. How do you know whether to shade above or below the line when graphing an inequality on the coordinate plane?

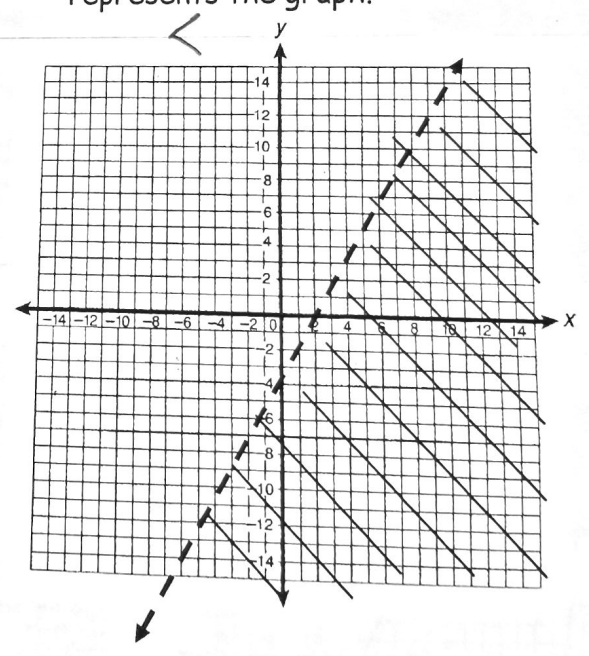
\geq $>$ \rightarrow above

\leq $<$ \rightarrow below

3. What is the inequality that represents the graph

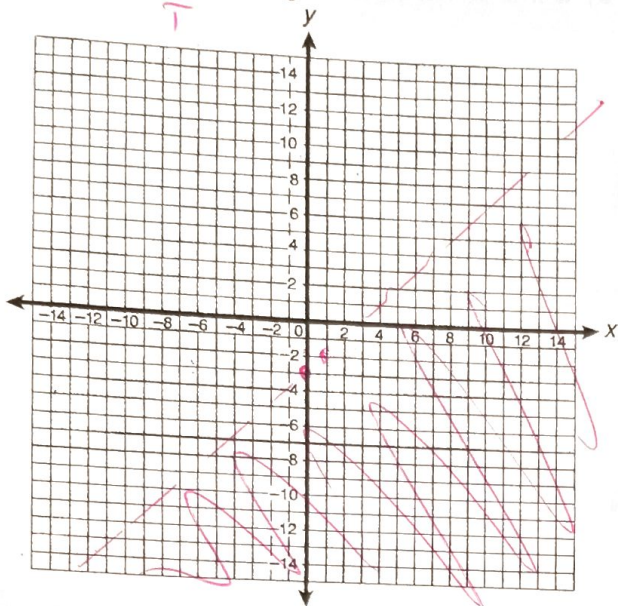


4. What is the inequality that represents the graph.

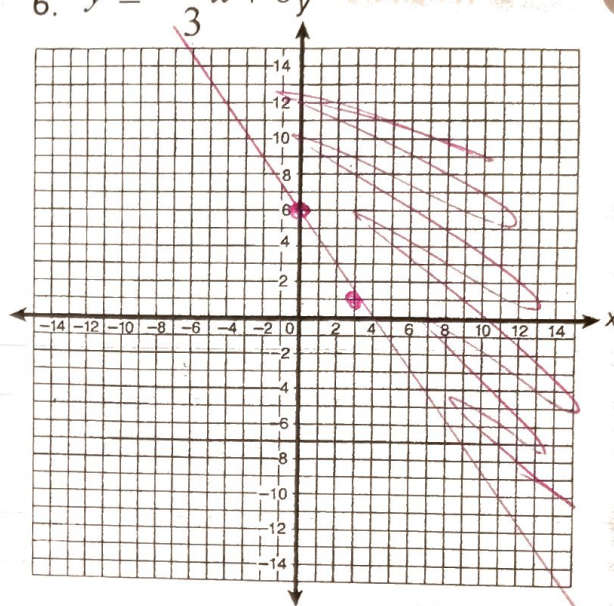


Sketch the graph of the inequality.

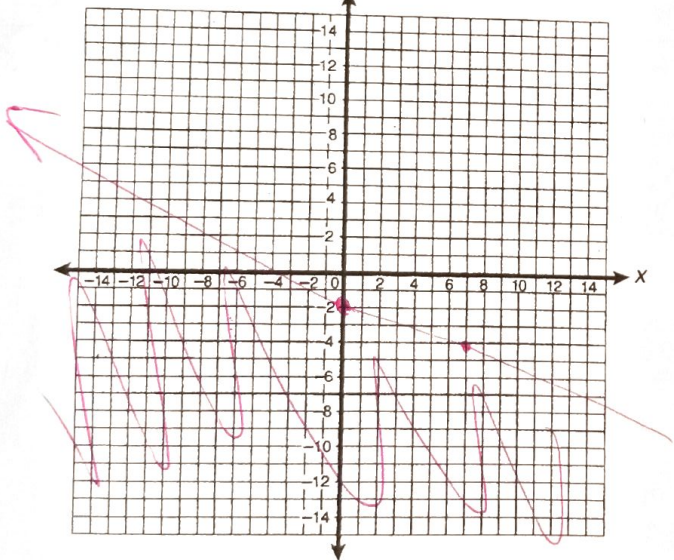
5. $y < \frac{1}{3}x - 3$



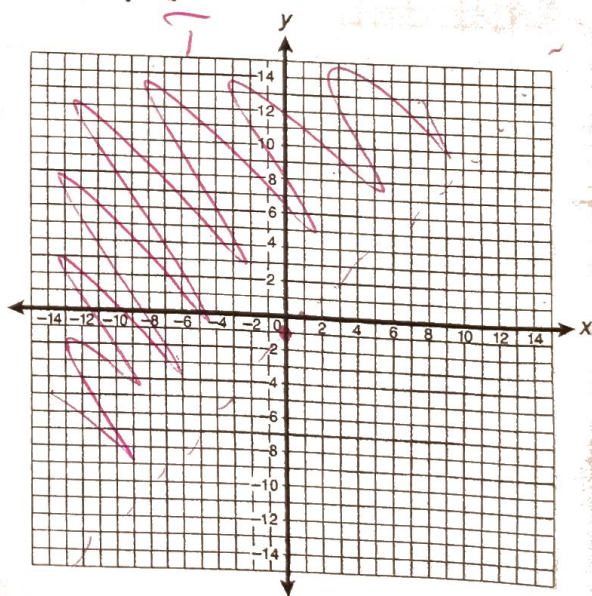
6. $y \geq -\frac{5}{3}x + 6$



7. $y \leq -\frac{2}{7}x - 2$



8. $y \geq \frac{1}{3}x - 1$



9. Which ordered pair is not a solution of the inequality $3x - 2y < 12$?

- a. (1, 3) **b. (8, 3)** c. (6, 4) d. (-6, -4)

$$-3 < 12 \quad \begin{matrix} x & y \\ 3(8) & -2(3) < 12 \\ 18 & < 12 \end{matrix} \quad \times$$

10. Which ordered pair is a solution of the inequality $4x + 5y \leq 12$?

- a. (-2, -6)** b. (11, -1) c. (5, 4) d. (4, 5)

$$4(-2) + 5(-6) \leq 12 \\ -38 \leq 12 \quad \checkmark$$

11. Carlos has at most \$20 to spend on a bouquet of flowers. Carnations cost \$1 each and roses \$2 each.

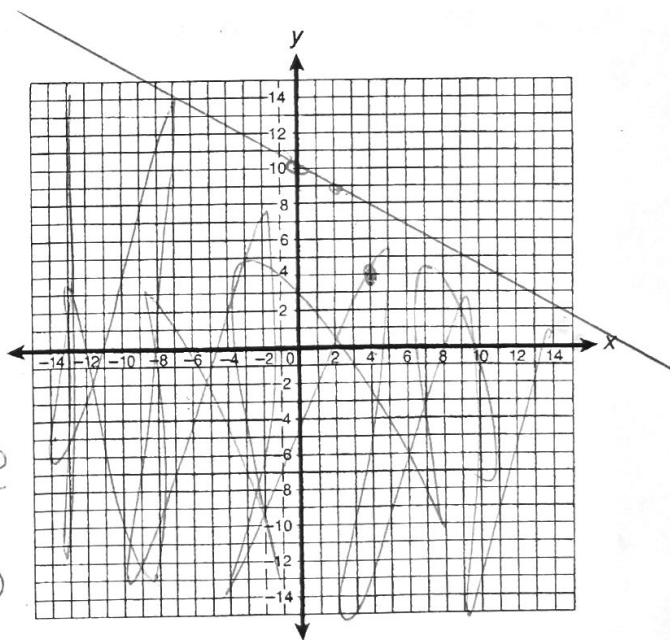
- a. Write and graph the inequality that shows the number of carnations and roses Carlos can buy.

$x = \text{carnations}$
 $y = \text{roses}$

$$1x + 2y \leq 20 \\ \underline{-1x} \quad \underline{-1x}$$

$$\frac{2y}{2} \leq \frac{-1x + 20}{2}$$

$$y \leq -\frac{1}{2}x + 10$$



- b. Give an example of a possible combination of flowers Carlos can buy within his budget.

4 carnations
4 roses

No Negatives!