

Directions: Calculators are not allowed.

- 1) Find the y-intercept of the given line.
A) $5y = 5x - 15$ B) $2x - 6y = 24$ C) $y = -3x + 6$ D) $2x = 3y + 6$
- 2) A) Write the equation of the horizontal line which passes through the point $(-6, 5)$.
B) Write the equation of the vertical line which passes through the point $(8, 2)$.
- 3) Find the slope of the line which passes through the following pairs of points.
A) $(2, -1), (4, 8)$ B) $(3, -6), (-1, -6)$ C) $(2, 7), (2, -3)$
- 4) Given the following 4 lines, circle the one which is the steepest.
A) $y = \frac{3}{2}x - 2$ B) $y = -1\frac{3}{4}x + 4$ C) $y = -1.9x$ D) $y = 1.6x + 5$
- 5) A) Line b is parallel to line c. Line b has a slope of -4 . What is the slope of line c?
B) Line j is perpendicular to line k. Line k has a slope of $\frac{2}{5}$. What is the slope of line j?
- 6) A) Find the x-intercept of the line $8x - 3y = 24$.
B) Find the y-intercept of the line $-2x - y = -10$.
- 7) Find the slope of the line $3x - 5y = 2$. (Remember to change to slope-intercept form first.)
- 8) Which of the following points satisfies the linear inequality $2x - y < -8$?
A) $(-4, 0)$ B) $(2, 4)$ C) $(5, 2)$ D) $(-6, 2)$
- 9) Write the equation of a line which has a slope of 3 and passes through $(-2, 5)$. Write your answer in slope-intercept form.
- 10) Write the equation of a line which has a slope of $-\frac{3}{4}$ and a y-intercept of 2. Write your answer in slope-intercept form.
- 11) Write the equation of a line which passes through the points $(2, 5)$ and $(4, 2)$. Write your answer in slope-intercept form.

12) Write the equation of a line which passes through $(-1, 5)$ and is parallel to a line which contains the points $(4, -3)$ and $(5, -1)$. Write your answer in slope-intercept form.

13) Write the equation of a line which passes through $(2, 6)$ and is perpendicular to a line which contains the points $(-5, 8)$ and $(1, 5)$. Write your answer in slope-intercept form.

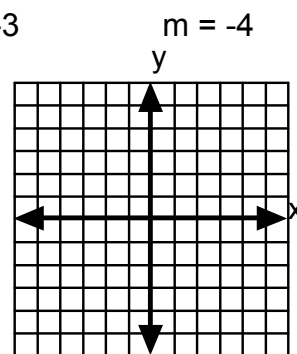
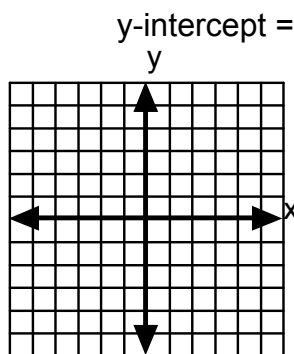
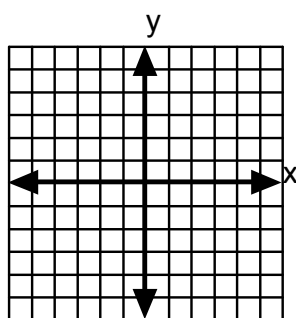
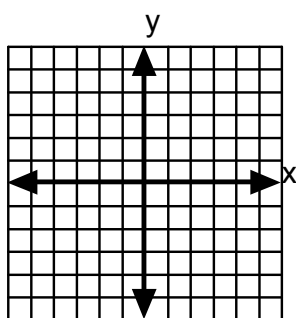
14) Sketch the line graph from the given information.

A) $y = -\frac{1}{3}x + 1$
 $(2, 0)$

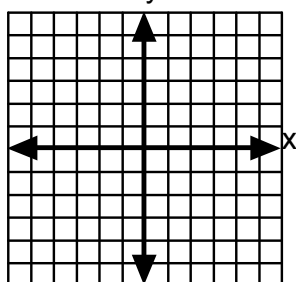
B) $-x + 3y = -3$

C) x-intercept = 2

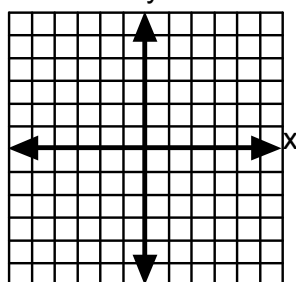
D) Contains



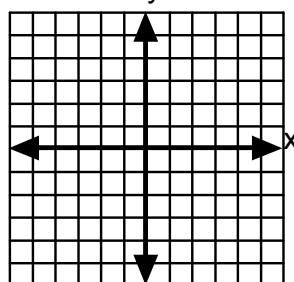
E) $y = x$



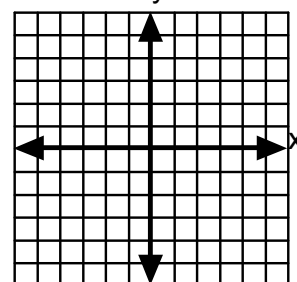
F) $x + 3 = -1$



G) $4y + 1 = 13$

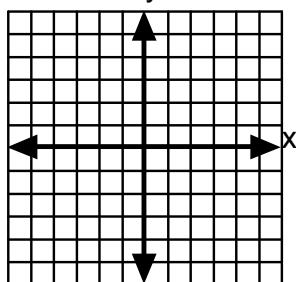


H) $2y = 4x + 6$

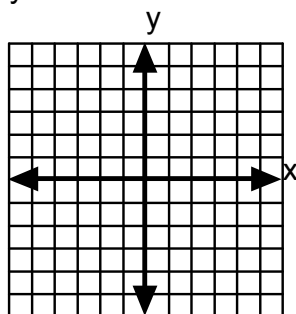


15) Sketch the graph of each of the following inequalities.

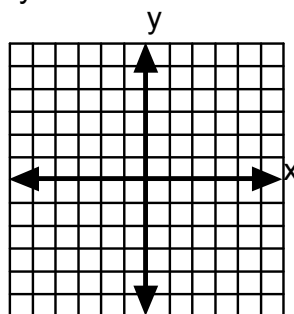
A) $2y > 4$



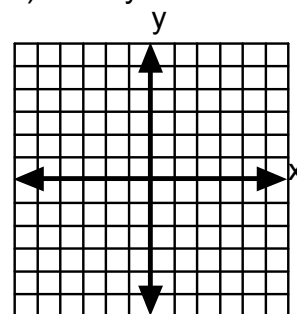
B) $y \geq \frac{1}{2}x$



C) $y \leq -x + 3$



D) $3x - y > 3$



E) $y \geq -x$

F) $3x < 9$

G) $2y \leq -4x + 2$

H) $y > x + 2$

