1. The value of the x-intercept for the graph $4x + 3y = 12$ is

1. 3
2. -4
3. $-\frac{4}{3}$
4. $\frac{4}{3}$

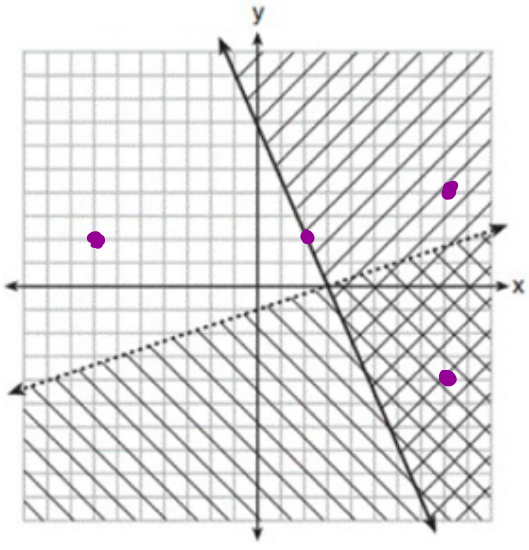
$y = 0$

$4x + 3(0) = 12$

$4x = 12$

$x = 3$

2. What is one point that lies in the solution set of the system of inequalities graphed below?



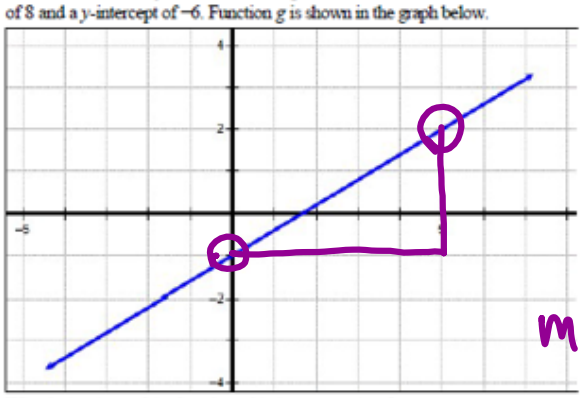
1. $(-7, 2)$
2. $(2, 2)$
3. $(8, -4)$
4. $(8, 4)$

3. The cost of a taxi ride, C (in dollars), after a certain distance m (measured in miles) is modeled by the function $C(m) = 1.25m + 5$. In terms of cost and distance, which statement describes the meaning of the slope?

1. The cost increases by \$1.25 as the distance increases by 10 miles.
2. The cost increases by \$12.50 as the distance increases by 10 miles.
3. The cost increases by \$1.25 as the distance decreases by 10 miles.
4. The cost decreases by \$12.50 as the distance increases by 10 miles.

12.50

4. The students at Myers Park HS were given information about two linear functions. Function f has an x-intercept of 8 and a y-intercept of -6. Function g is shown in the graph below.



What is the slope of the function with the greater slope?

1. $\frac{3}{5}$
2. $\frac{5}{3}$
3. $\frac{4}{3}$
4. $\frac{5}{3}$

$\Delta y = 3$

$\Delta x = 5$

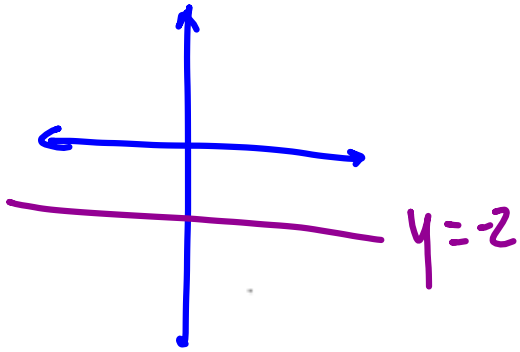
$m = \frac{3}{5}$

$\Delta y = 6$

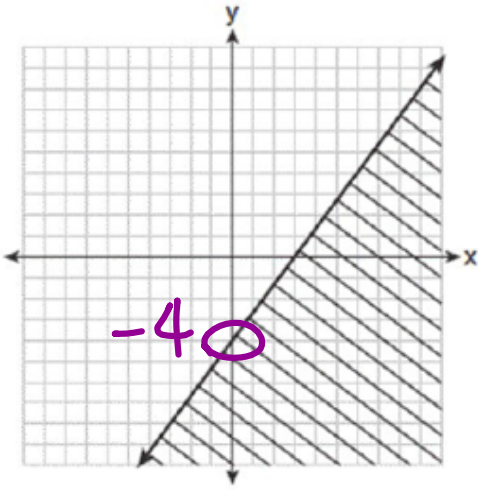
$\Delta x = 8$

$m = \frac{6}{8} = \frac{3}{4}$

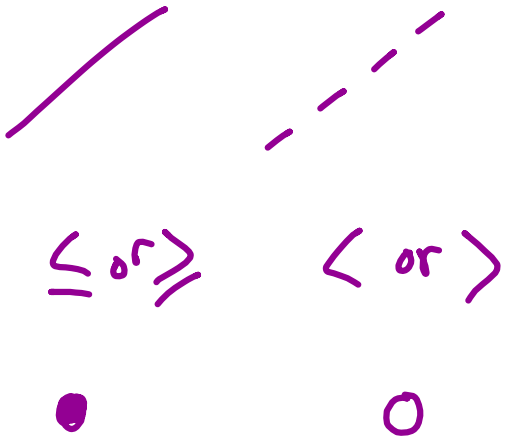
5. The graph of the equation $y = -2$ is a line
   1. parallel to the x-axis
   2. parallel to the y-axis
   3. passing through the origin
   4. passing through the point (-2,0)



6. Which inequality is shown in the graph below?



1. $y \leq \frac{4}{3}x + 3$
2. $y \geq \frac{4}{3}x + 3$
3. $y \leq \frac{4}{3}x - 4$
4. $y \geq \frac{4}{3}x - 4$



7. What is an equation of the line that passes through the points (2, 1) and (6, −5)?

1. $y = -\frac{3}{2}x - 2$
2. $y = -\frac{3}{2}x + 4$
3. $y = -\frac{2}{3}x - 1$
4. $y = -\frac{2}{3}x + \frac{7}{3}$

$m = \frac{-5-1}{6-2} = \frac{-6}{4} = -\frac{3}{2}$

$y = -\frac{3}{2}x + b$

$1 = -\frac{3}{2}(2) + b \quad 1 = -3 + b \quad 4 = b$

8. What is the solution of the inequality $-6x - 17 \geq 8x + 25$?

1. $x \geq 3$
2. $x \leq 3$
3. $x \geq -3$
4. $x \leq -3$

$-6x - 17 \geq 8x + 25$

$-8x \quad -8x$

$-14x - 17 \geq 25$

$+17 \quad +17$

$-14x \geq 42$

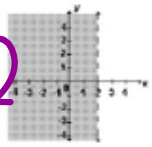
$x \leq -3$

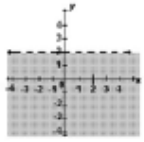
9. What is the solution of $3(2m - 1) \leq 4m + 7$?

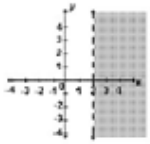
1. $m \leq 5$ 2. $m \geq 5$
3. $m \leq 4$ 4. $m \geq 4$

$$6m - 3 \leq 4m + 7$$
$$-4m + 3 \quad -4m + 3$$
$$2m \leq 10$$
$$m \leq 5$$

10. Which graph represents the inequality $x < 2$?

1. 

2. 

3. 

4.