1. When $3x + 2 \leq 5(x - 4)$ is solved for x, the solution is

   1. $x \leq 3$ 2. $x > 3$
   3. $x \leq -11$ 4. $x \geq 11$

$$3x + 2 \leq 5x - 20$$
$$-3x \qquad -3x$$
$$2 \leq 2x - 20$$
$$\frac{22}{2} \leq \frac{2x}{2} \qquad x \geq 11$$

2. The value of the x-intercept for the graph $2x - 5y = 30$ is

1. $-\frac{2}{5}$
2. -6
3. 15
4. $\frac{2}{5}$

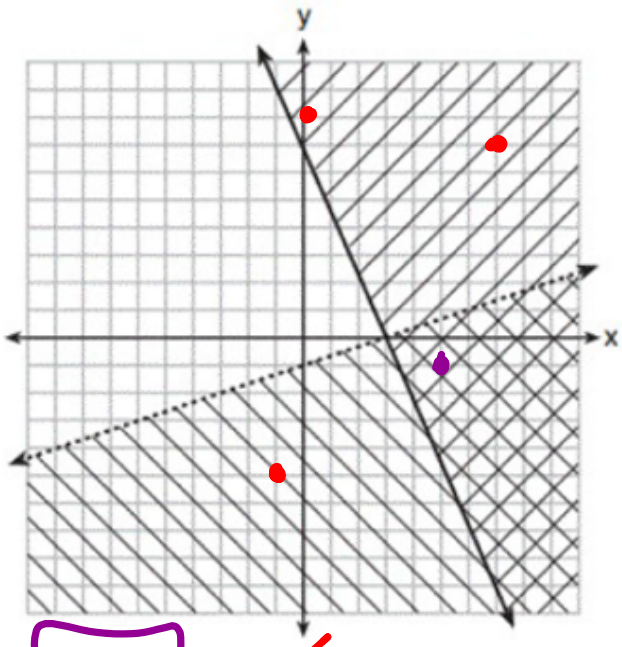
$y = 0$

$2x - 5(0) = 30$

$2x = 30$

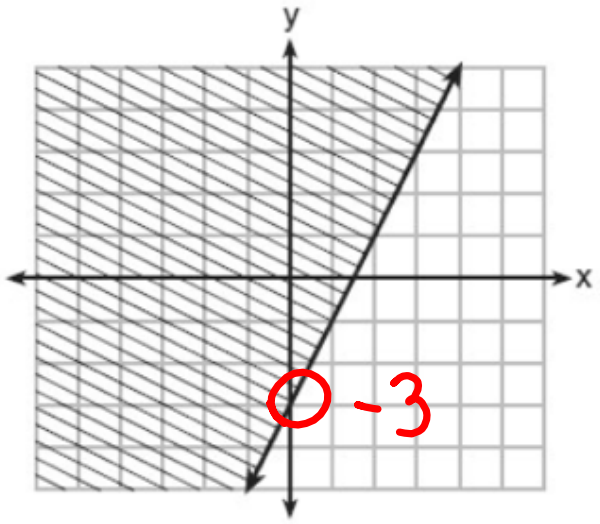
$x = 15$

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



1. (5, −1)
2. (0, 8)
3. (−1, −5)
4. (7, 7)

4. Which inequality is represented by the graph below?



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

5. Which equation represents the line that passes through the points (-1,-2) and (3,10)?

1. $y = 3x + 1$
2. $y = 3x - 1$
3. $y = 4x + 2$
4. $y = 4x - 2$

$$m = \frac{10-(-2)}{3-(-1)} = \frac{12}{4} = 3$$

$y = 3x + b$

$10 = 3(3) + b$

$10 = 9 + b$, $b = 1$

6. The cost of a pack of chewing gum in a vending machine is \$0.75. The cost of a bottle of juice in the same machine is \$1.25. Julia has \$22.00 to spend on chewing gum and bottles of juice for her team and she must buy seven packs of chewing gum. If b represents the number of bottles of juice, which inequality represents the maximum number of bottles she can buy?

1. $0.75b + 1.25(7) \geq 22$
2. $0.75b + 1.25(7) \leq 22$
3. $0.75(7) + 1.25b \geq 22$
4. $0.75(7) + 1.25b \leq 22$

7. What is the slope of a line that passes through the points (-2,-7) and (-6,-2)?

1. $-\frac{4}{5}$
2. $-\frac{5}{4}$
3. $\frac{8}{9}$
4. $\frac{9}{8}$

$$m = \frac{-2-(-7)}{-6-(-2)} = \frac{5}{-4}$$

8. What is the solution of the system of equations below?

$2x + 3y = 7$

$x + y = 3$

1. (1,2)
2. (2,1)
3. (4,–1)
4. (4,1)

$2x + 3y = 7$

$-2x - 2y = -6$

$y = 1$

$x + 1 = 3$

$x = 2$

9. Given the table below that lists points on a line, what is the y-intercept of the line?

x	–6	–3	0	3	6
y	6	4	2	0	–2

1. 0
2. 2
3. 3
4. 4

10. What is the value of the y-coordinate of the solution to the system of equations $x + 2y = 9$ and $x - y = 3$?

1. 6
2. 2
3. 3
4. 5

$$x + 2y = 9$$
$$-x + y = -3$$
$$3y = 6$$
$$y = 2$$