Algebra 1RCC
Assignment #42A
Graphing: Linear Inequalities

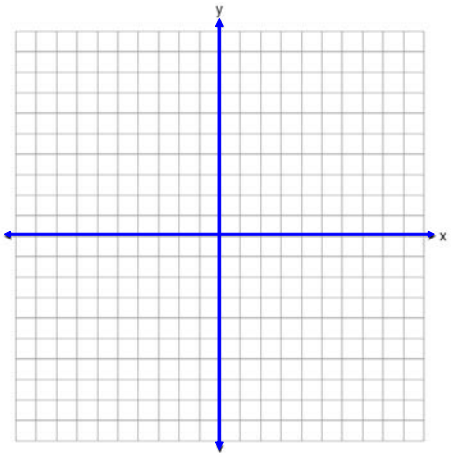
1. Is the solution to the graph of $x + y > 5$ the region above or below the line $x + y = 5$? Explain your answer.

2. Is the solution to the graph of $3x - 2y \leq 12$ the region above or below the line $3x - 2y = 12$? Explain your answer.

Solve for y in terms of x (y should be on the left side), the graph each linear inequality.

3. $y - 2x > 0$ 4. $5x > 2y$ 5. $y - x \geq 3$ 6. $3x - y \geq 4$

3.



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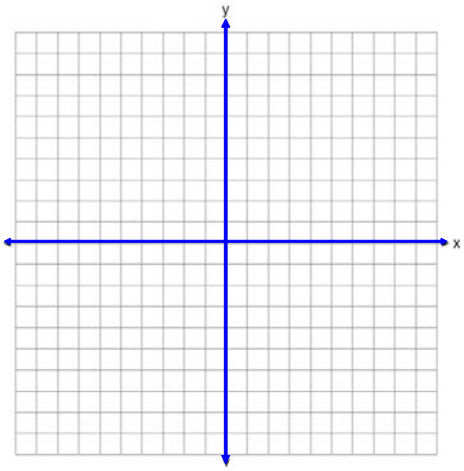

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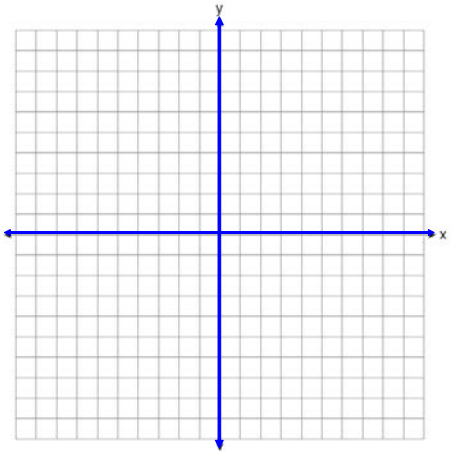

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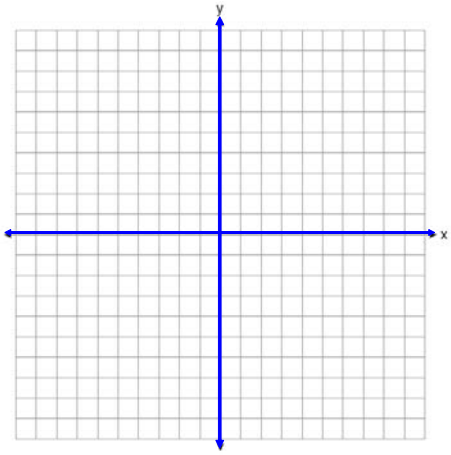

R1. Which value of x is in the solution set of the inequality, -4x + 2 > 10?

(A) -2 (B) 3 (C) 2 (D) -4

R2. Find the slope of a line that passes through the points A(0, 2) and B(5, 0).

R3. Find the value of x that satisfies the equation

$$\frac{7}{3}\left(x+\frac{9}{28}\right)=20?$$

R4. Solve for k: 2x – 5y = – 9; (3, k)

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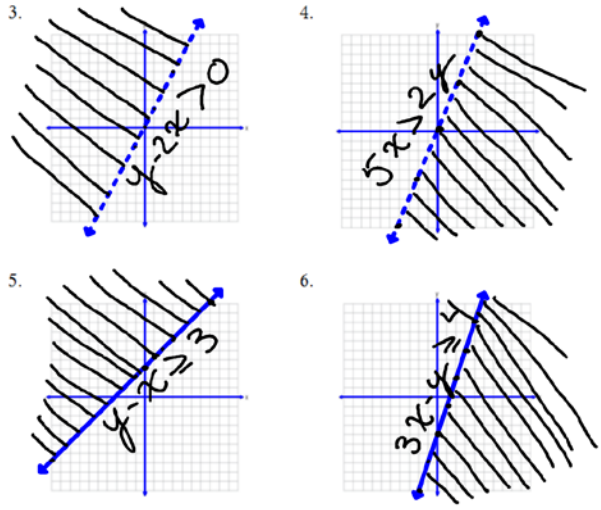
1. above because it was greater than
2. above because it was greater than after dividing by the negative
3. $y > 2x$
4. $y < \frac{5}{2}x$
5. $y \geq x + 3$
6. $y \leq 3x - 4$



R1. D

R2. $-\frac{2}{5}$

R3. $x = 8.25$

R4. $k = 3$