

7.5 Practice Problems answers

Directions: Tell whether the ordered pair is a solution of the inequality.

1) $x \geq -3$; $(-4, 0)$

$$-4 \geq -3$$

Not A

SOLUTION

2) $\frac{3}{4}x - \frac{1}{3}y < 6$; $(-8, 12)$

$$\frac{3}{4}(-8) - \frac{1}{3}(12) < 6$$

$$-6 - 4 < 6$$

$$-10 < 6$$

Yes!

3) Which ordered pair is not a solution of $x + 5y < 15$?

a) ~~$(-1, -3)$~~ b) ~~$(-1, 3)$~~ c) $(1, 3)$ d) $(3, 2)$

$$-1 + 5(-3) < 15$$

$$-1 - 15 < 15$$

$$-16 < 15$$

$$\checkmark$$

$$-1 + 5(3) < 15$$

$$-1 + 15 < 15$$

$$14 < 15$$

$$\checkmark$$

$$1 + 5(3) < 15$$

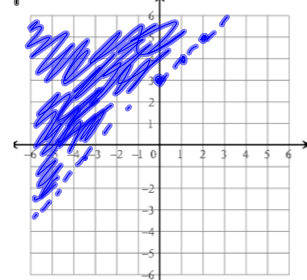
$$1 + 15 < 15$$

$$16 < 15$$

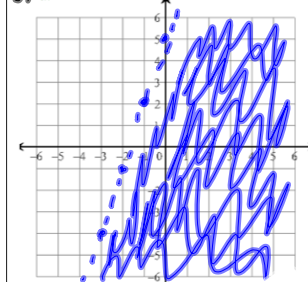
$$\text{NO}$$

Directions: Graph the Inequality.

4) $y > x + 3$

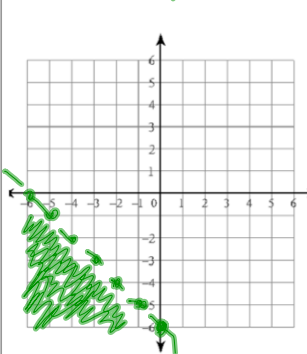


5) $y < 3x + 5$



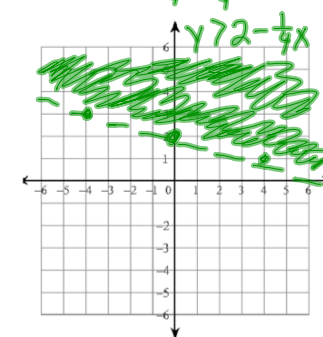
6) $x + y < -6$

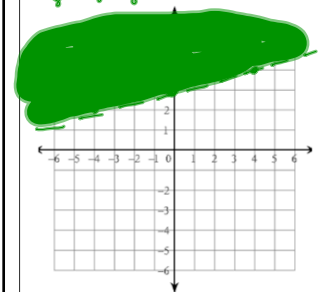
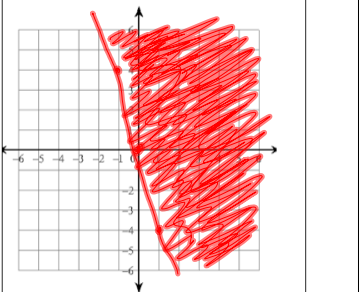
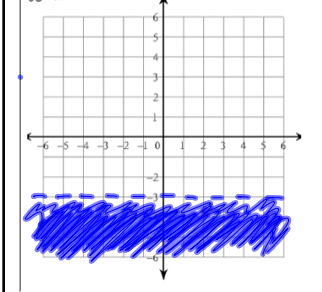
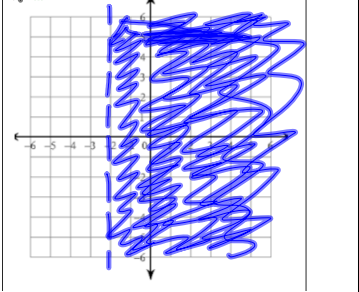
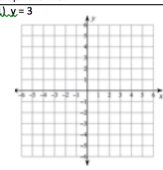
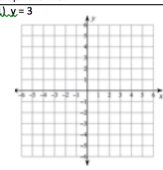
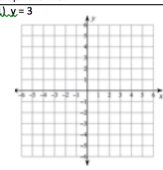
$$\rightarrow -x \quad y < -x - 6$$



7) $x + 4y > 8$

$$\rightarrow \frac{4y}{4} > \frac{8-x}{4}$$



<p>8) $2(x+2) > 8y$ $\frac{2x+4}{2} > \frac{8y}{2} \rightarrow x+2 > 4y$ $x > 4y - 2$</p> 	<p>9) $-4y \leq 16x$ $\frac{-4y}{-4} \leq \frac{16x}{-4}$ $y \geq -4x$</p> 			
<p>10) $y < -3$</p> 	<p>11) $x > -2$</p> 			
<p>Skillz Review</p> <table border="1"> <tr> <td data-bbox="472 772 690 1003"> <p>Graph the line. 1) $y = 3$</p>  </td> <td data-bbox="690 772 885 1003"> <p>Evaluate. 2) $m^2 - 2n^3$, when $m = -6$ and $n = -2$</p> </td> <td data-bbox="885 772 1149 1003"> <p>Solve. 3) $2(6n - 3) = 34 + 7n$</p> </td> </tr> </table>		<p>Graph the line. 1) $y = 3$</p> 	<p>Evaluate. 2) $m^2 - 2n^3$, when $m = -6$ and $n = -2$</p>	<p>Solve. 3) $2(6n - 3) = 34 + 7n$</p>
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