

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!

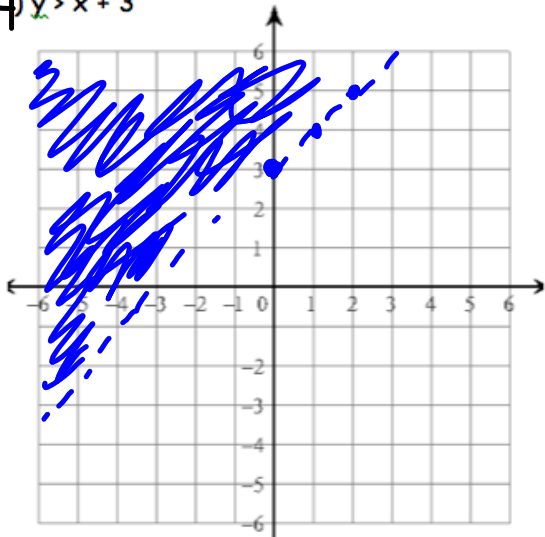
3) Which ordered pair is not a solution of $x + 5y < 15$?

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

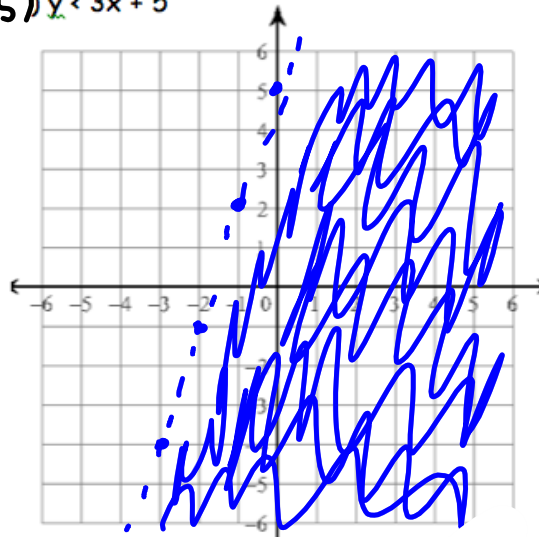
$-1 + 5(-3) < 15$ $-1 + -15 < 15$ $-16 < 15$ \checkmark	$-1 + 5(3) < 15$ $-1 + 15 < 15$ $14 < 15$ \checkmark	$1 + 5(3) < 15$ $1 + 15 < 15$ $16 < 15$ NO
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Directions: Graph the Inequality.

4) $y > x + 3$

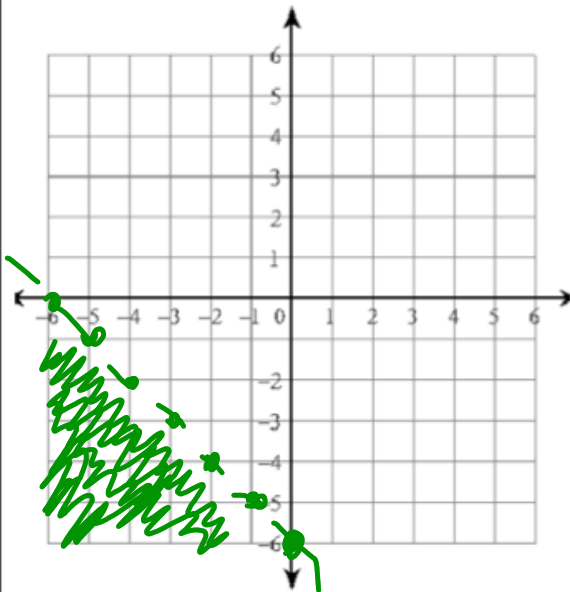


5) $y < 3x + 5$



6) $x + y < -6$

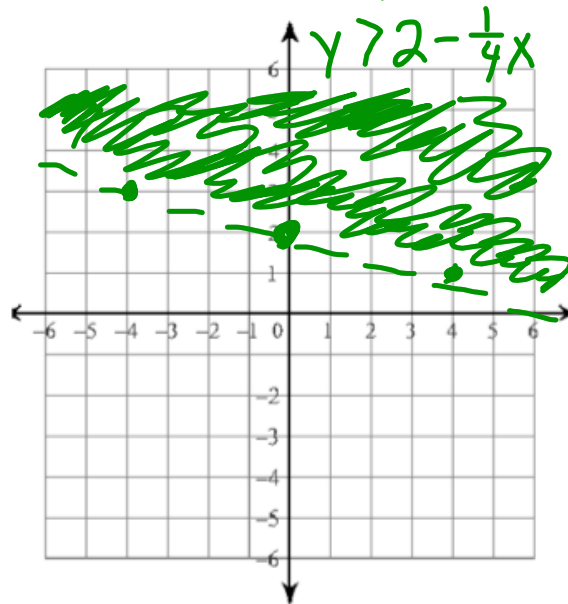
$-x -x \quad y < -x - 6$



7) $x + 4y > 8$

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

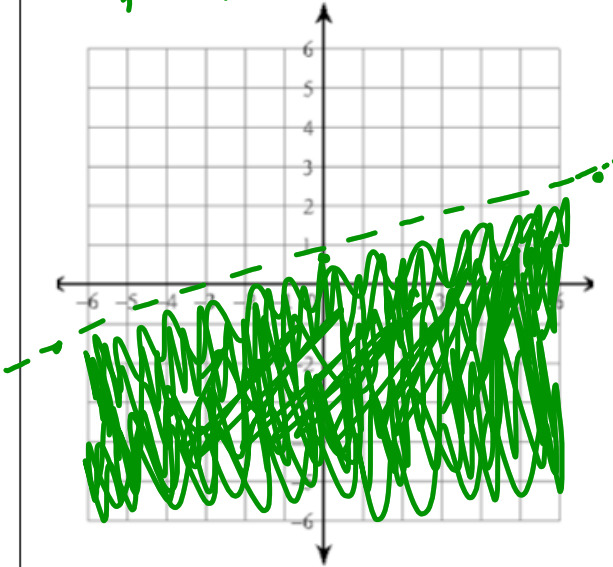
$y > 2 - \frac{1}{4}x$



$$8) 2(x+2) > 7y$$

$$\frac{2x+4}{7} > \frac{7y}{7}$$

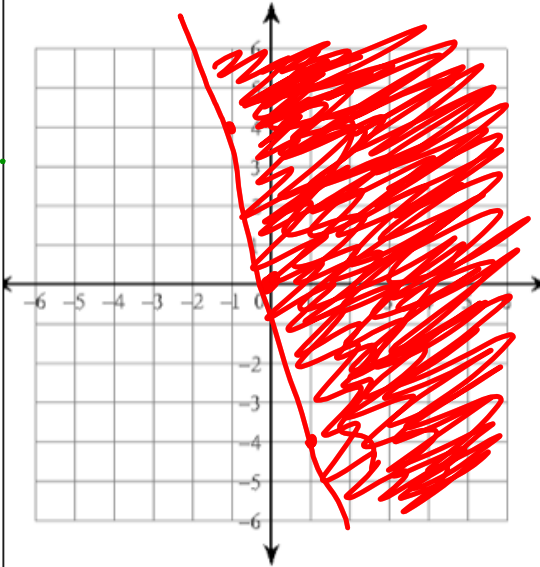
$$\frac{2}{7}x + \frac{4}{7} > y$$



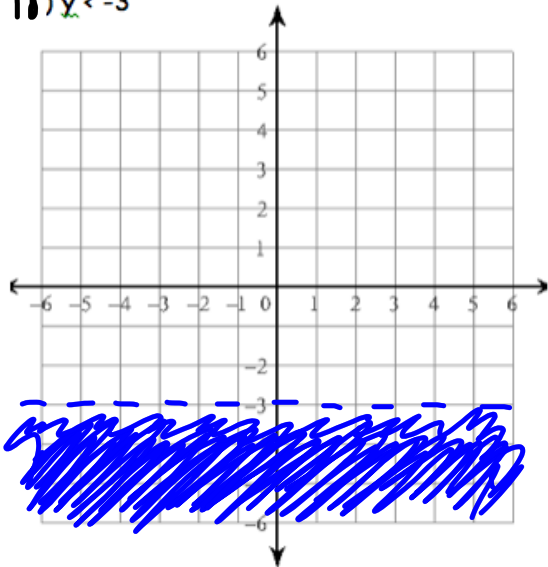
$$9) -4y \leq \frac{16x}{-4}$$

$$y \geq -4x$$

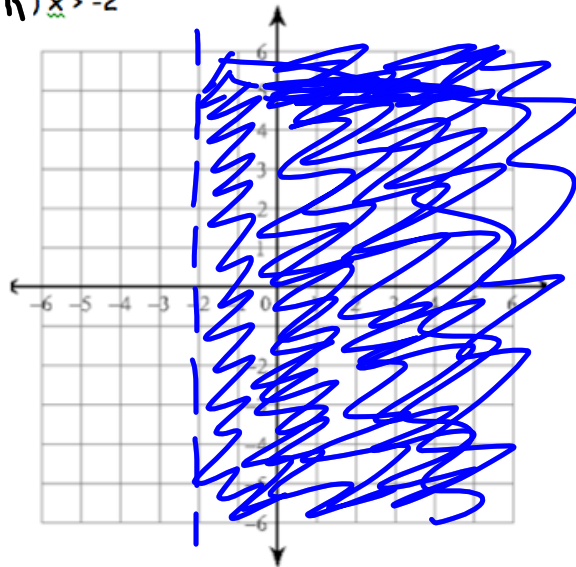
$$y \geq -4x$$



$$10) x < -3$$



$$11) x > -2$$





Jun 13-12:35 PM