

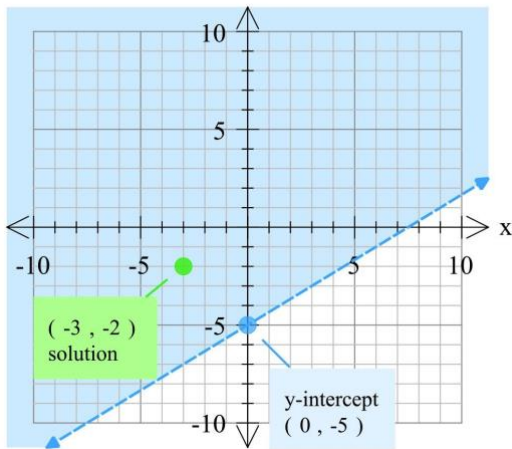
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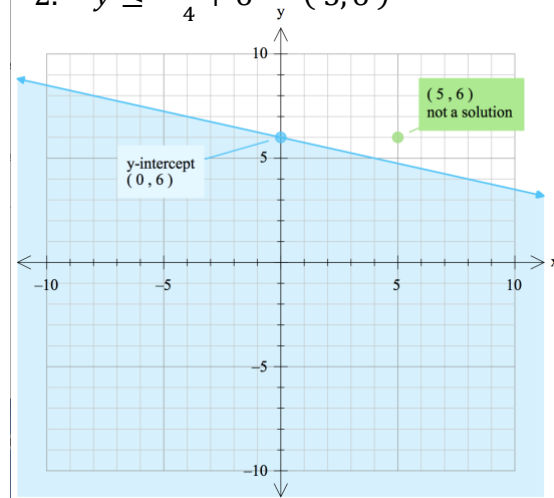
Linear Inequalities and Solutions Answers

Section I. Graph the inequality on the coordinate plane. Determine if the given point is a solution to the inequality.

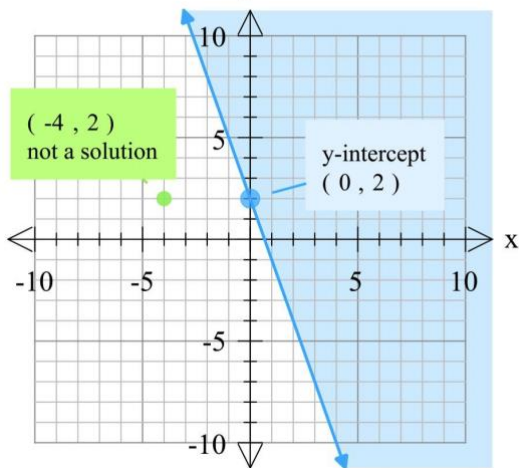
1. $y > \frac{2}{3}x - 5$ $(-3, -2)$



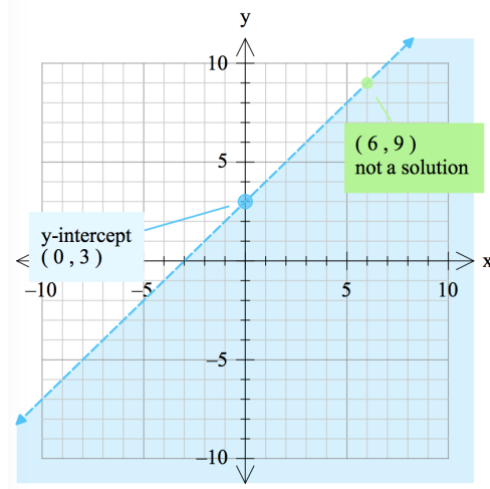
2. $y \leq -\frac{x}{4} + 6$ $(5, 6)$



3. $y \geq -3x + 2$ $(-4, 2)$



4. $y < x + 3$ $(6, 9)$



Section II. Use Algebra to determine if the coordinate is a solution to the inequality.

5. $y > -5x - 4$ $(9, -24)$

$$-24 > -5(9) - 4 \quad \text{true, it is a solution}$$

6. $y < \frac{4}{5}x - 6$ $(10, 2)$

$$2 < \frac{4}{5}(10) - 6 \quad \text{false, not a solution}$$

7. $y \leq \frac{-x}{2} + 7$ $(12, -5)$

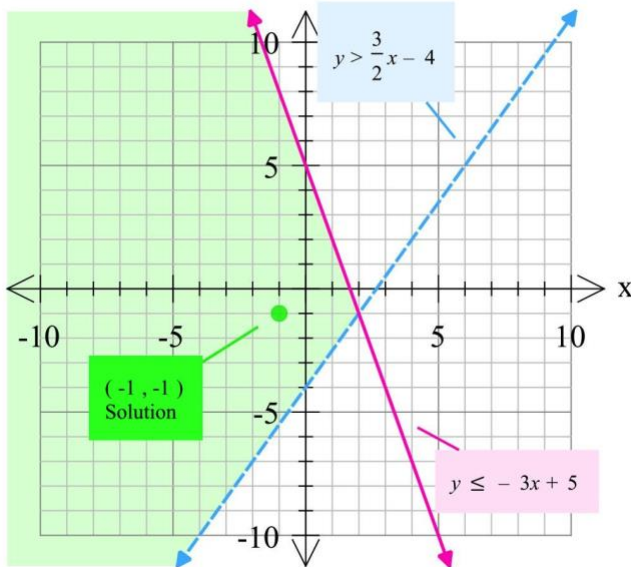
$$-5 \leq \frac{-12}{2} + 7 \quad \text{true, it is a solution}$$

8. $y \geq 4x - 3$ $(-1, -13)$

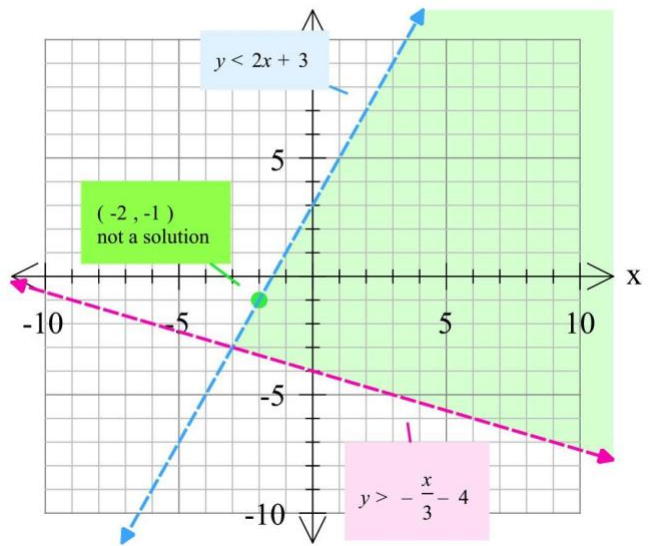
$$-13 \geq 4(-1) - 3 \quad \text{false, not a solution}$$

Section III. Graph the inequalities on the coordinate plane. Determine if the given point is a solution to the linear system.

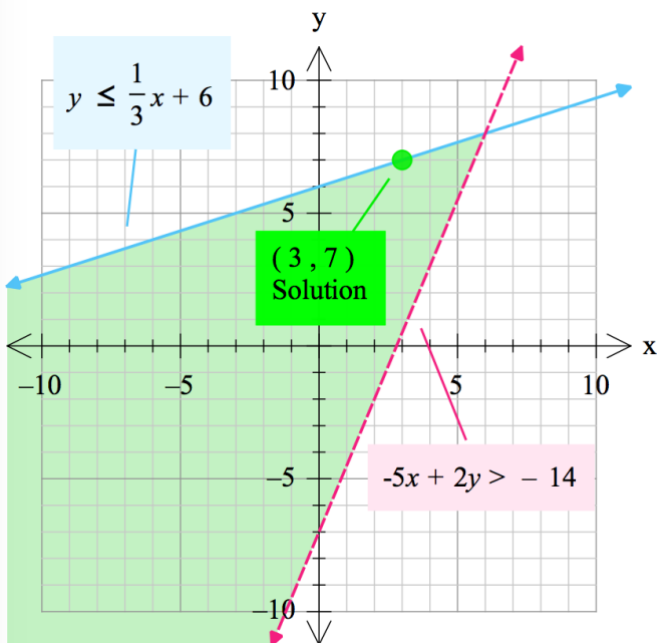
9. $y > \frac{3}{2}x - 4$ $(-1, -1)$
 $y \leq -3x + 5$



10. $y < 2x + 3$ $(-2, -1)$
 $y > -\frac{x}{3} - 4$



11. $y \leq \frac{1}{3}x + 6$ $(3, 7)$
 $-5x + 2y > -14$



12. $4x - y > -1$ $(2, -3)$
 $3x - 2y \geq 8$

