math Antics Worksheets

Name:

Date:

Solving Linear Inequalities - Set 1

IIA 1

Instructions: Solve each inequality for y. Remember to "Flip" the inequality sign whenever you switch the sides of the equation, or whenever you multiply or divide both sides by a negative number or term.

1 $5x > y + 7$

$-7 \quad -7$

$5x - 7 > y$

$y < 5x - 7$

2 $-6y < 3x$

3 $2x - y \leq 4x$

4 $-3y + 3x > 0$

5 $0 > 5y - 10x$

6 $-4x < -y + 1 - x$

7 $-\frac{y}{4} + 2x \geq 5x$

8 $8 - \frac{x}{2} \geq -y$

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Solving Linear Inequalities - Set 2

IIA 2

Instructions: Solve each inequality for y. Remember to "Flip" the inequality sign whenever you switch the sides of the equation, or whenever you multiply or divide both sides by a negative number or term.

1 $-\frac{y}{2} - 4 < 5x + 2$

$+4 \qquad +4$

$(-2)\frac{y}{-2} < (5x + 6)(-2)$

$y > -10x - 12$

2 $-x + 1 < 3x + y$

3 $\frac{y + 1}{-2} \geq 7x$

4 $-2y + 5 > 6x - y$

5 $-x < \frac{y + 2x}{-5}$

6 $10x \leq -20y$

7 $x - y < \frac{y + x}{2}$

8 $-(y + 2) < 1 - 9x$

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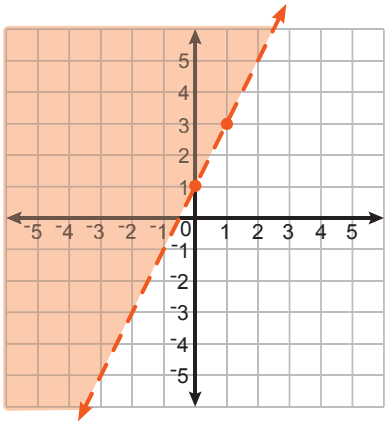
Graphing Linear Inequalities - Set 1

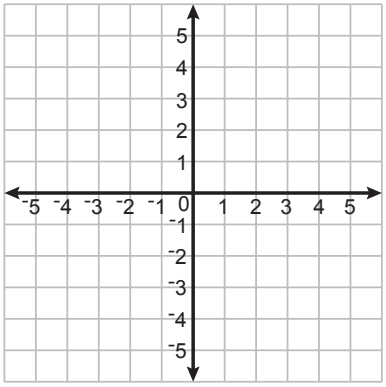
IIA 3

Instructions: Graph each linear inequality using the simple procedure you learned in the video.

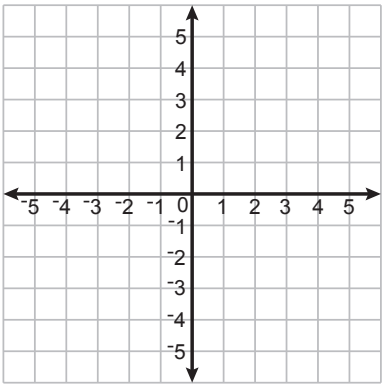
1 $y > 2x + 1$



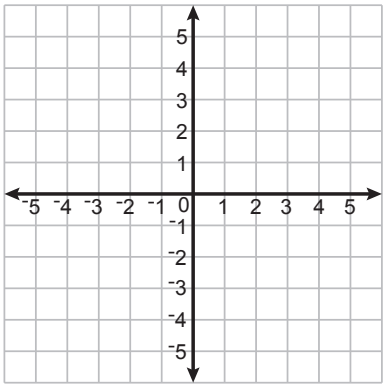
2 $y < x - 3$



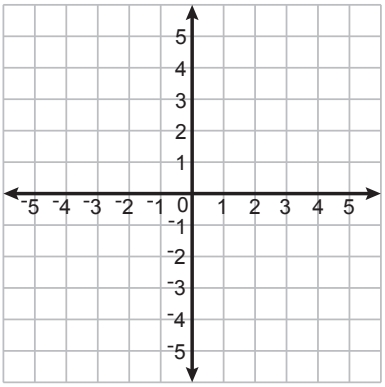
3 $y \leq x + 1$



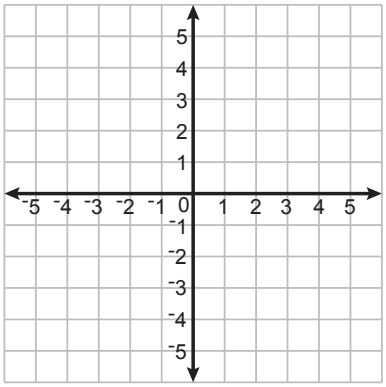
4 $y < -3$



5 $y \geq -2x$



6 $y > \frac{-x}{2} + 2$



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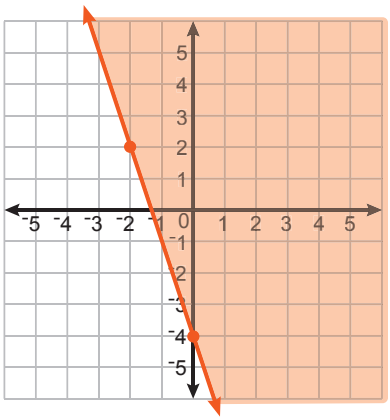
Graphing Linear Inequalities - Set 2

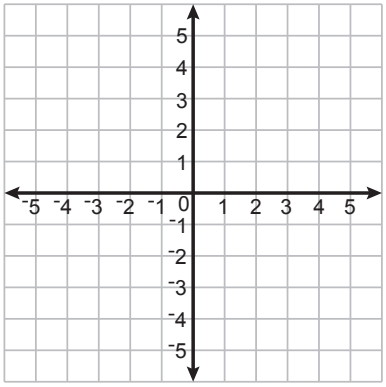
IIA 4

Instructions: Graph each linear inequality using the simple procedure you learned in the video.

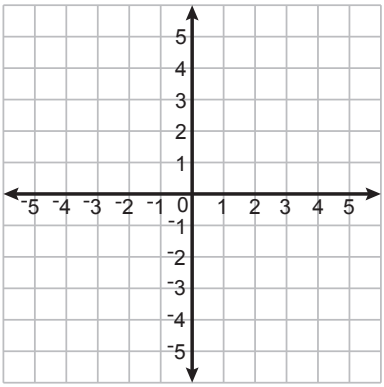
1 $y \geq -3x - 4$



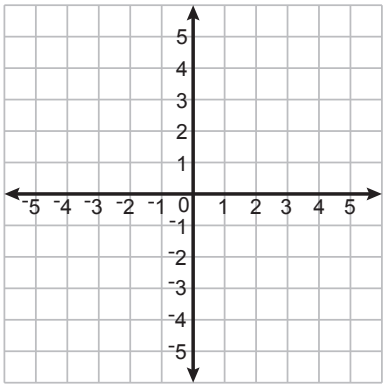
2 $y \leq -x + 2$



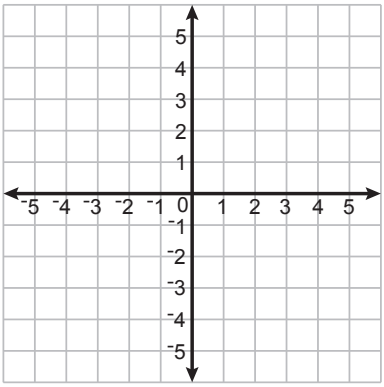
3 $y > \frac{x}{3} + 1$



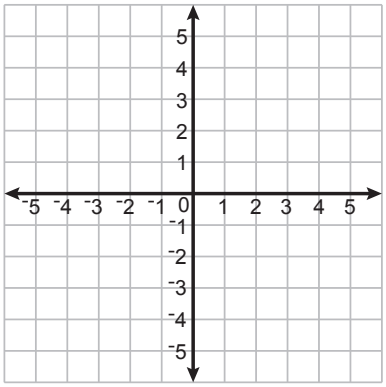
4 $y < 4x - 5$



5 $y > -2x - 3$



6 $y \leq \frac{-x}{2} - 3$



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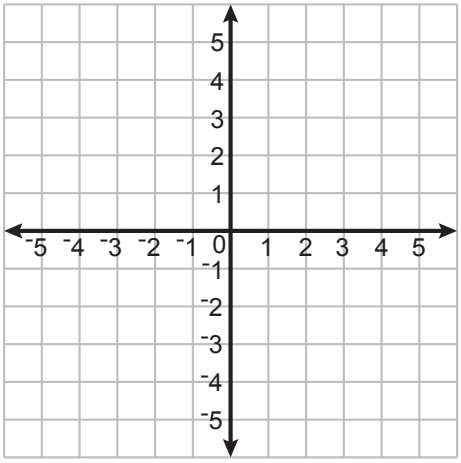
Solving & Graphing Linear Inequalities

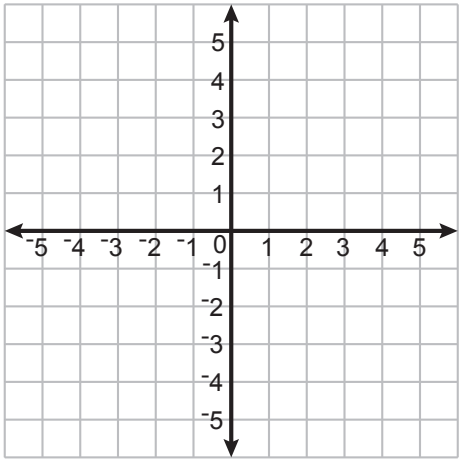
IIA 5

Instructions: Solve each inequality for y and then graph it on the coordinate plane.

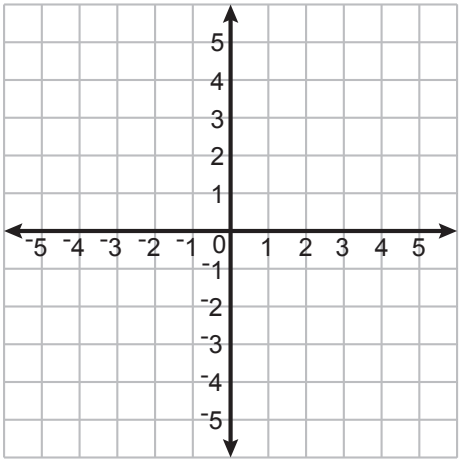
1 $4 - y \geq 3x$



2 $x > 4y + 8$



3 $x + 7 > 10 - y$



4 $3y - 2x \geq 2y + 5$