

Activator

Is the point $(5,1)$ a solution to the inequality? Yes

$$f(x) > -2x + 4$$

$$f(5) > -2(5) + 4$$

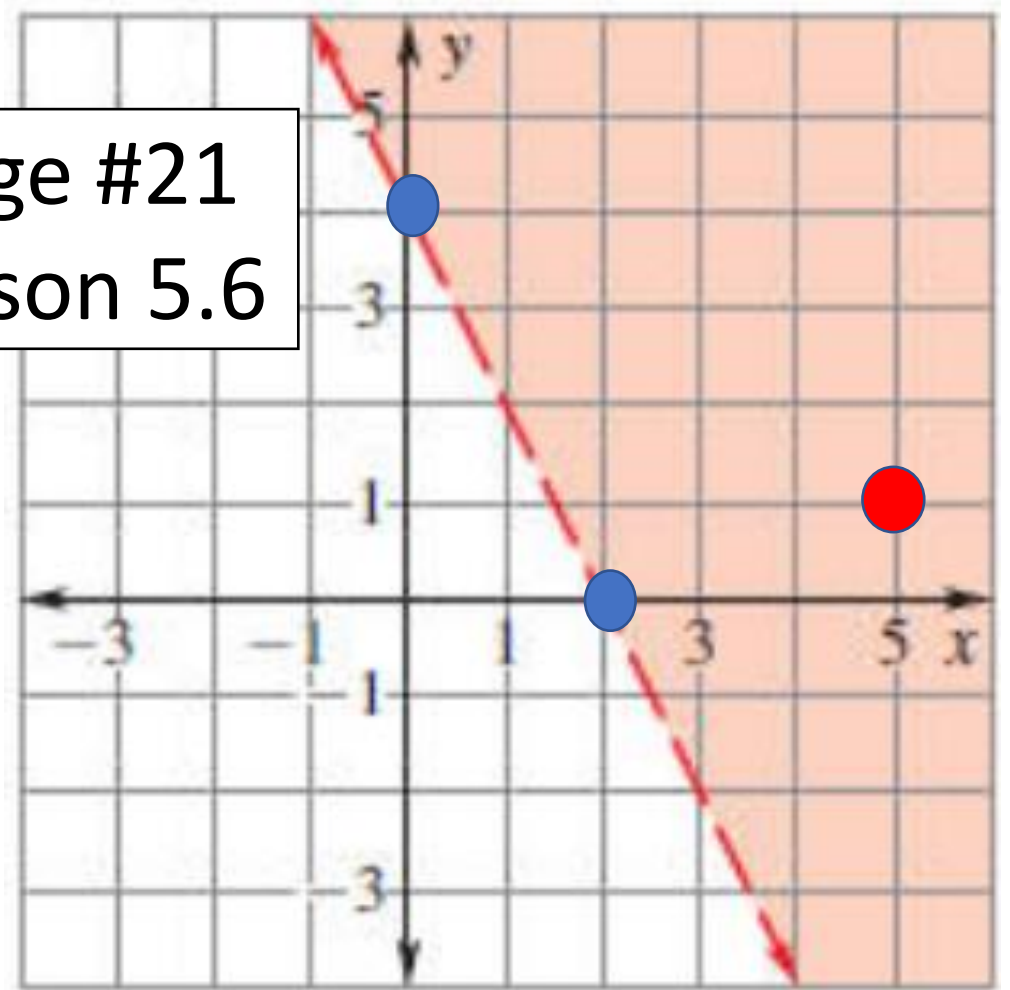
$$f(5) > -10 + 4$$

$$1 > -6$$

$$1 > -6$$

Yes, the point $(5,1)$ is a solution.

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Lesson 5.6



Today's Objective

Unit 5

Lesson 6

Students will be able to graphing inequalities with fractions.





Today's New Vocab (1 of 3)

Write the inequality.

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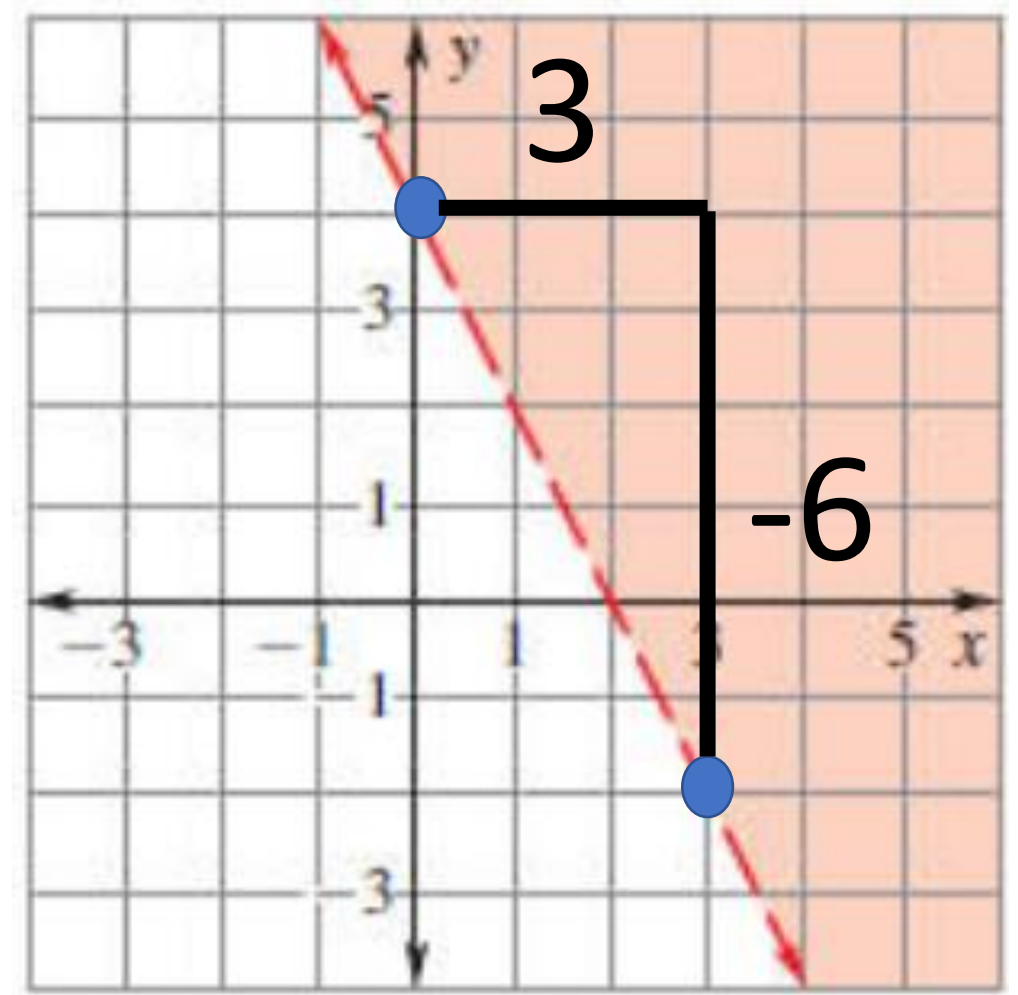
Where does
the line start?

$$y \geq \frac{-6}{3}x + 4$$



Right?

Shade above or below?



$$y > -2x + 4$$

Today's New Vocab (2 of 3)

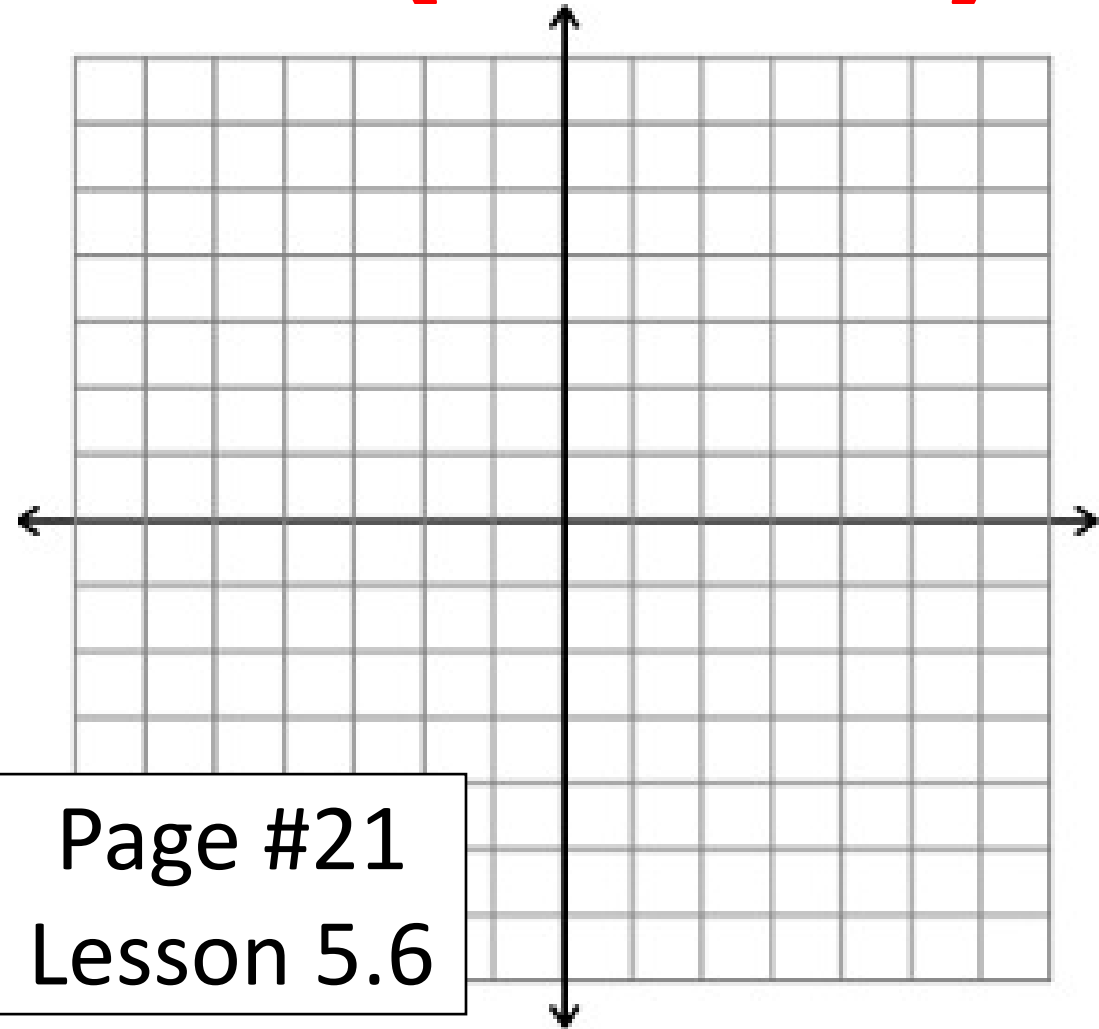
Graph the function

$$g(x) \leq 2x+1?$$

x	$g(x)$
0	1
1	3
2	5
3	7

Shade above
or below?

Write one Solution : (_____ , _____)



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Today's New Vocab (3 of 3)

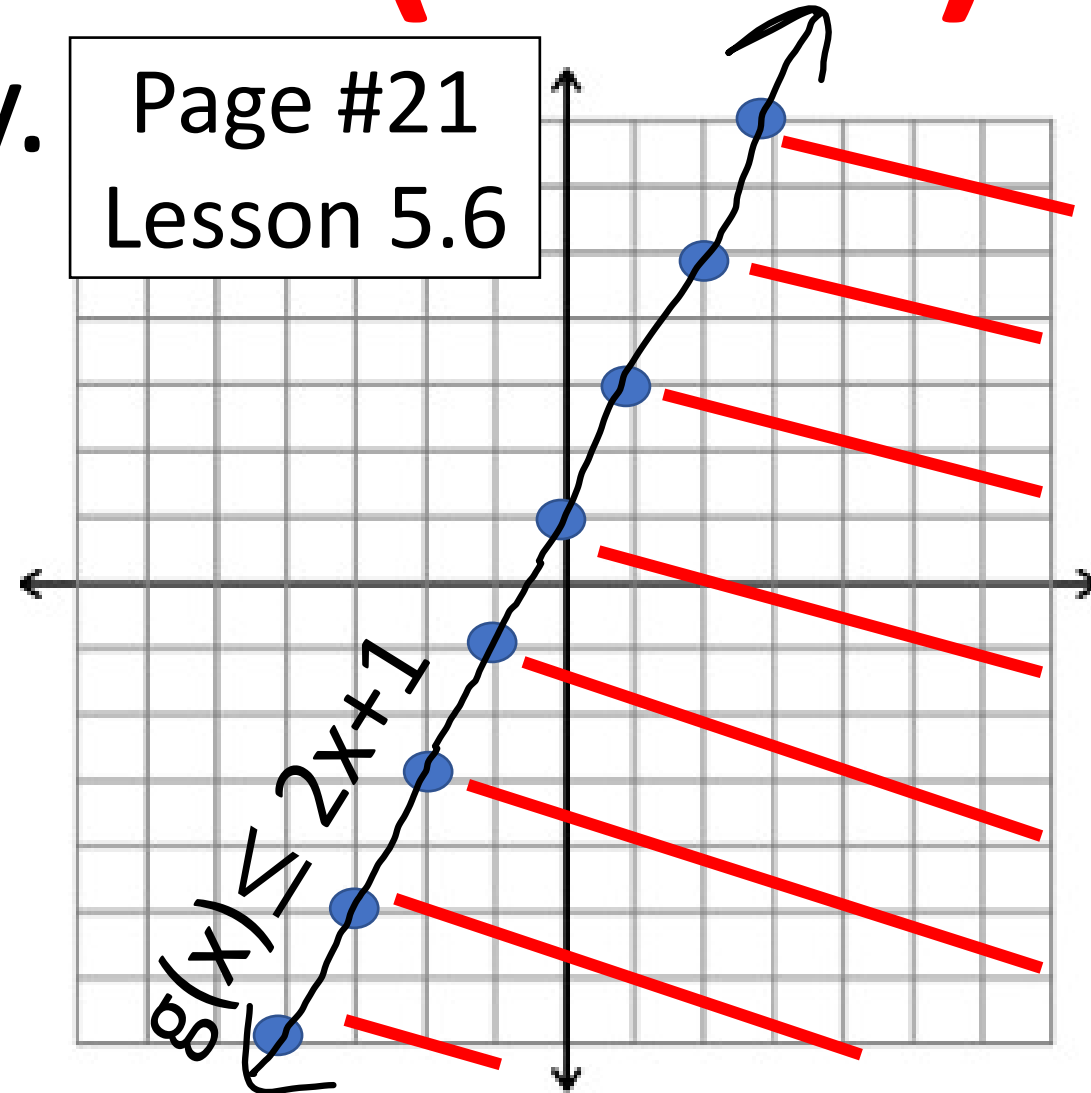
Graph the inequality.

$$f(x) \geq \frac{-2}{3}x + 1$$

x	f(x)
-3	3
0	1
3	-1
6	-3

Shade above
or below?

Is the point (6,2) a solution? Yes Why?



Work Period

Determine if the point $(6, 2)$ is a solution to the system?

$$g(x) \leq 2(x) + 1$$

$$g(6) < 2(6) + 1$$

$$g(6) < 12 + 1$$

$$g(6) < 13$$

$$2 < 13$$

Yes, solution.

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Both are True
 $(6, 2)$ is a solution
to this system of
inequalities.

$$f(x) \geq \frac{-2}{3}x + 1$$

$$f(6) \geq \frac{-2}{3}(6) + 1$$

$$f(6) \geq -4 + 1$$

$$f(6) \geq -3$$

$$2 \geq -3$$

Yes,
solution.

Work Period

Which ordered pair is in the solution set of $j(x) < 2x + 1$?
(1,5) or (0,1) or (5,2) or (-3,1)

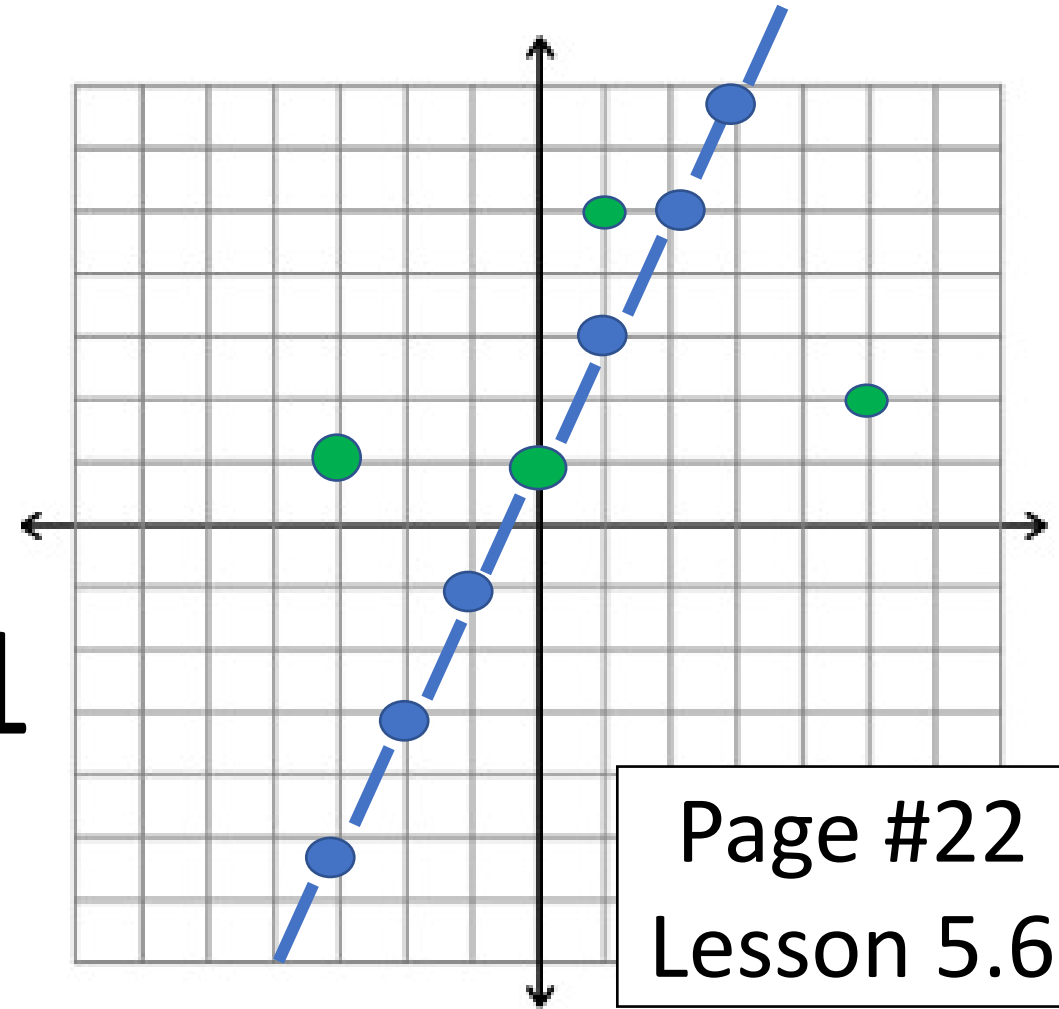
x	$j(x)$
0	1
1	3
2	5
3	7

$$j(x) < 2x + 1$$

$$(2) < 2(5) + 1$$

$$2 < 10 + 1$$

$$2 < 11 \text{ True}$$



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Where do you shade?

Group Work Questions

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Lesson 5.6

Directions: All groups, please do all of the questions. Use your notes from last class to help you. [Ask 2 people before you ask me.]

Yesterday, we did Lesson 5.6 Notes.

#2 has a mistake. It is a GREATER THAN sign, NOT a less than.

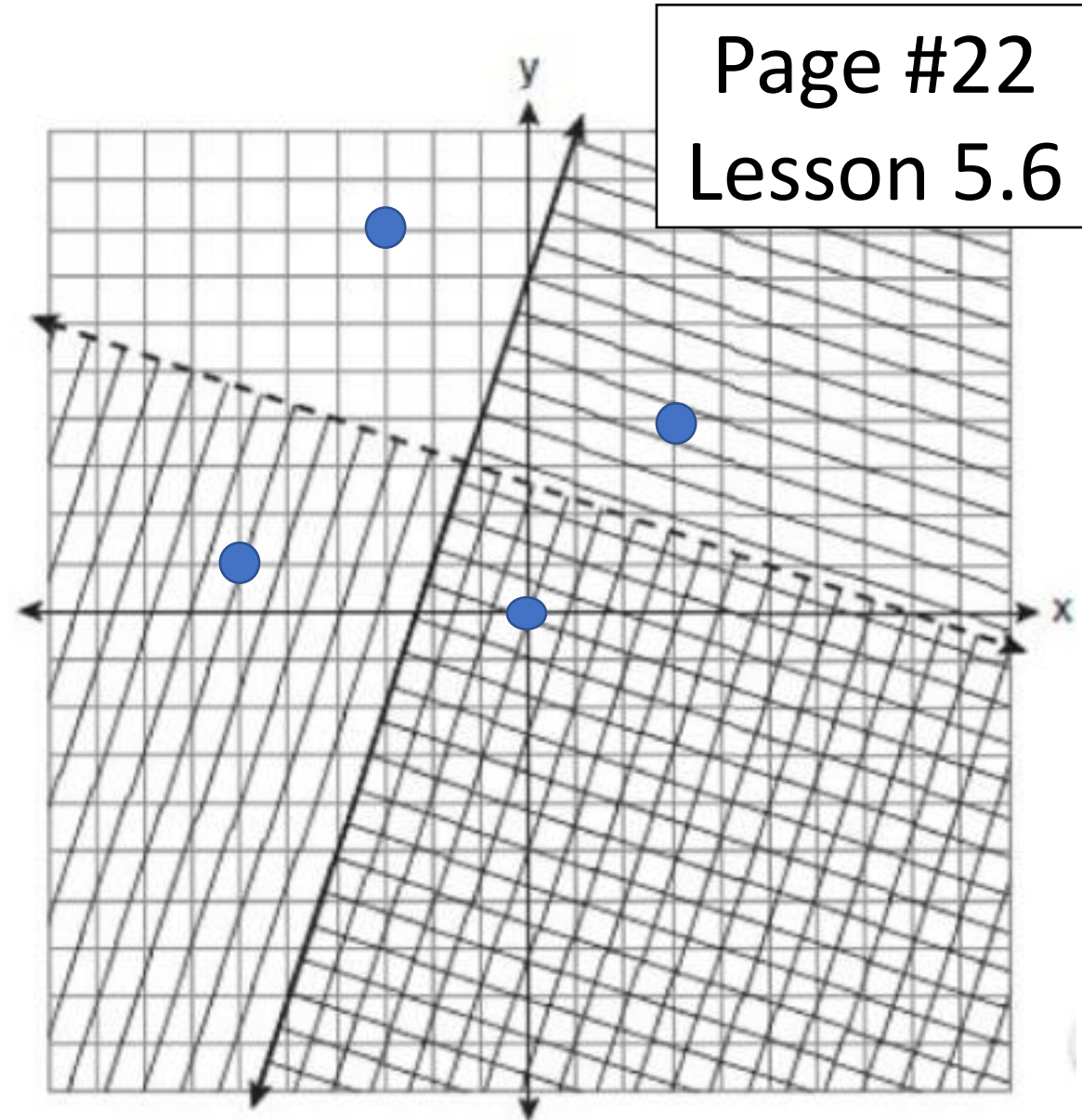
2nd Stop @ 9:03 3rd Stop @ 10:06 8th Stop @ 2:20

*One person from each group will present one question.

Exit Ticket

Which ordered pair is in the solution set of the system of linear inequalities graphed
 $(0, 0)$

Which ordered pairs are **NOT** in the solution set of the system of linear inequalities graphed?
 $(-6, 1)$ and $(-3, 8)$ and $(3, 4)$





Lesson 5.6 Game

“Pictionary”

Each question
asked earns \$5.

Directions: Recreate the graph.

Partners are encouraged.

Grab the slip and worksheet from me.

Draw the system on your paper.

Then, find the graph on the table.

#13, #19 are hard. Each correct answer \$10.