## Activator

Create a table and a graph.

$$
y \leq 2 x-3
$$ Is there shading? Yes



# Today’s Objective <br> Unit 5 Lesson 5 

Students will be to graph a system of inequalities and equations in standard form.


# Today's New Vocab (1 of 3) 

 Write the inequality in Slope Intercept Form$\mathrm{Y}=\mathrm{Mx}+\mathrm{B}$. Page \#17
Lesson 5.5

$$
\begin{aligned}
& y-2 x \leq-3 \\
& +2 x \quad+2 x
\end{aligned}
$$

What is wrong with

$$
y \leq-3+2 x
$$

$$
y \leq 2 x-3
$$

$-2 x$ is on the wrong side,
Because the " $y$ " needs to be by itself. Write the inequality in Slope Intercept Form. $Y=M x+B$.

$$
\begin{aligned}
& 3 x+y \geq 7 \\
& -3 x
\end{aligned}
$$

What is wrong with the current inequality?

$$
y \geq 7-3 x
$$

$$
Y \geq-3 x+7
$$

The $3 x$ is on the wrong side. The " $y$ " needs to be by itself.

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Lesson 5.5

Today’s New Vocab (3 of 3) Graph the inequality $f(x) \geq-3 x+7$.
Write a solution. (_, _ $)$


## Work Period

Determine if the point $(2,1)$ is a solution to the system?

$$
\begin{aligned}
& y-2 x \leq-3 \begin{array}{|c|}
\hline \text { Page \#18 }
\end{array} \quad 3 x+y \geq 7 \\
& (1)-2(2) \leq-3^{\text {Lesson } 5.5} 3(2)+(1) \geq 7 \\
& 1-4 \leq-3 \text { Yes, both } \\
& -3 \leq-3 \text { inequalities } \\
& \text { are True. } \\
& 6+1 \geq 7 \\
& \text { Yes, }(2,1) \\
& \text { is a solution. }
\end{aligned}
$$

## Group Work Questions

Directions: All groups, please do all of the questions. Use your notes from last class to help you. [Ask 1 person before you ask me.] Yesterday, we did Lesson 5.5 Notes. Pg. 20 is ONLY extra Credit. NOT REQUIRED. $1^{\text {st }}$ Stop @ 8:15 **Fast Exit Ticket today. *One person from each group will present one question.

## Exit Ticket

What is the solution to the system of equations?

Write a solution to the system of inequalities.


## Each question asked earns \$1.

 MatchingMatch the graph, equations, and solution together. There should be
6 different groups with 3 in each group.
**Ask a partner for help before you ask me.

