## Activator

## What is the solution (or point)

 if $x=-3$ when $f(x)=4 x-5$ ?$$
f(x)=y
$$

$$
\begin{aligned}
f(-3) & =4(-3)-5 \\
f(-3) & =-12-5 \\
f(-3) & =-17 \\
(-3, & -17)
\end{aligned}
$$

## Today’s Objective <br> Unit 5

 Lesson 1 Students will be able to identify and write solutions.


# Today's New Vocab (1 of 4) 

Define solution: A point on the line.
For a system, it is the point on both lines.
Is the point $(2,-7)$ on the line $f(x)=-5 x+3$ ?
Page \#1

$$
\begin{aligned}
(-7) & =-5(2)+3 \\
-7 & =-10+3
\end{aligned}
$$

The last equation is true. $-7=-7$ So, the point is on the line.

## Today’s New Vocab (2 of 4)

 Is the point $(1,-2)$ on the line $f(x)=-5 x+3$ ?| $\mathbf{x}$ | $\mathbf{f}(\mathbf{x})$ |
| :---: | :---: |
| 0 | 3 |
| 1 | -2 |
| 2 | -7 |

Write one solution
(__, _ )
Write one
 Non-solution

$$
(\ldots, \ldots)
$$

# Today’s New Vocab (3 of 4) 

 What is the solution of the two equations?If there are two lines, the solution is where the lines intersect.

$$
(4,2) \text { is }
$$

the solution.


# Today (4 of 4) 

 Write the solution (intersection) to the system of equations.$$
(3,8)
$$

Which taxi is cheaper for 9 miles? Blue Cab

## Work Period

Page \#2
Lesson 5.1
Which set of coordinates ( $-6,-2$ ) or
$(3,-4)$ is a solution of the equation

$$
2 x-y=10 ? \quad 2 x-y=10 ?
$$

$2(3)-(-4)=10$
$6+4=10$ $10=10$
Yes, it is a solution

$$
\begin{array}{r}
2(-6)-(-2)=10 \\
-12+2=10 \\
-10=10
\end{array}
$$

The point $(3,-4)$ is on the line.

# Group Work Questions 

Pages 3-4
Lesson 5.1
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.] You can skip \#7 and \#8.
Yesterday, we did Lesson 5.1 Notes.
$2^{\text {nd }}$ Stop @ 9:03 $3^{\text {rd }}$ Stop @ 10:06
$8^{\text {th }}$ Stop @ 2:20
*One person from each group will present one question.

## Exit Ticket

Determine if the ordered pair $(4,-3)$ is a solution of $y-5 x=23$.

$$
\begin{aligned}
(-3)-5(4) & =23 \\
-3-20 & =23 \\
-23 & =23
\end{aligned}
$$

No, $-23 \neq 23$. So, the point is NOT a solution. Therefore, it is also NOT on the line.

## Each question asked earns \$1.

## Matching

Match the graph, equations, and solution together. There should be 6 different groups with 3 in each group. In each group, there should be a letter, number, and point. Each correct group earns \$5.
**Ask a partner for help before you ask me.

