## Activator

## Solve for $y$ in both equations.

$$
\begin{array}{cc}
Y+5=-2 & Y+5=-2 x \\
-5 & -5 \\
Y=-7 & -5=-5 \\
Y=-2 x-5
\end{array}
$$

Is 5 and $2 x$ like terms? No

> | Page \#17 |
| :---: |
| Lesson 4.5 |

# Today’s Objective <br> Unit 4 Lesson 5 

## Students will be able to graph in standard form.



# Today’s New (1 of 4) Solve for $y$. Why? To use the 

Page \#17 Lesson 4.5 $3 y=18-6 x \quad$ calculator to graph.
$\div 3 \div 3 \quad$ What is the slope? $M=-2$

$$
y=6-2 x \quad \text { What is the } v \text {-intercept? } B=\underline{6}
$$

$y=B+m x$ is the same as $y=m x+B$.
Why? The commutative property switches the order.

Today’s New Vocab (2 of 4) Solve for $y$ and make a table. $6 x+3 y=18$
$-6 x$

$$
\begin{gathered}
3 y=18-6 x \\
\div 3=6 \div 3 \\
y=6-2 x \\
y=-2 x+6
\end{gathered}
$$

| $\mathbf{x}$ | $\mathbf{y}$ |
| :---: | :---: |
| 0 | 6 |
| 1 | 4 |
| 2 | $\mathbf{2}$ |
| 3 | 0 |

Today's New Vocab (3 of 4) Graph the following equation. $6 x+3 y=18$ is the same as $y=-2 x+6$

What is the y-intercept?

| $x$ | $y$ |
| :---: | :---: |
| 0 | 6 |
| 1 | 4 |
| 2 | 2 |
| 3 | 0 |



Lesson 4.5

## Today’s New Vocab (4 of 4)

 $Y=-3$ Graph the lines $x=2$

If it only has a y in the equation, It only touches the $y$-axis.

Page \#18<br>Lesson 4.5

## Work Period

The graph of the equation $x+3 y=6$ intersects the $y$-axis at the point whose coordinates $\quad x+3 y=6$ are ( $0, B$ ). What is $B$ ? $^{-X}$

$$
B=2
$$

Page \#18

$$
3 y=-x+6
$$ Lesson 4.5 Coordinate

$$
\text { is }(0,2)
$$

$$
\begin{array}{r}
\div 3 \\
y=-\frac{1}{3} x+2
\end{array}
$$

## Group Work Questions

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 4.5 Notes.
$1^{\text {st }}$ Stop @ 8:16
*One person from each group will present one question.

## Exit Ticket

What is the cost of four gallons of gas?

Gas Sales

What is the cost of 8 gallons of gas? What is
the cost of \$30 one gallon $\frac{15}{4}=\frac{30}{8}=\$ 3.75$
of gas?


Number of Gallons

Page \#18
Lesson 4.5

# Get all correct answers and SPIN the wheel. 

- Solve each of the equations for $y$ by organizing the pieces correctly.
(earn \$5 each)
- Then, graph each equation correctly.
(earn \$5 each)
***All pieces will NOT be used.

