## Name:

$\qquad$

## Lesson 6.2 - Slope Review

Definition of Slope $=$

Formula:

|  |  |  |  |
| :---: | :---: | :---: | :---: |
| Slope $=$ Positive | Slope $=$ Negative | Slope $=0$ | Slope $=$ undefined |

Examples:

|  |  |
| :---: | :---: |
| Graph that goes through (-2,5) and (3,-1) | Graph that goes through (2,-4) and (2,7) |

Assignment:
Find the Slope:

|  |  |
| :---: | :---: |
| Graph that goes through (-2.-3) and (3,7) | Graph that goes through (5,-2) and (-1,-2) |

Draw a line through the origin with a slope of...


## Slope-Intercept Form

$$
\begin{gathered}
y=m x+b \\
m=\text { slope } \\
b=y \text {-intercept }
\end{gathered}
$$

## Example:

| Linear Equation: | Slope | Y-Intercept |
| :---: | :--- | :--- |
| $y=\frac{2}{3} x+2$ |  |  |
| $y=-x-5$ |  |  |

Assignment:

| Linear Equation: | Slope | Y-Intercept |
| :---: | :--- | :--- |
| $y=2 x-5$ |  |  |
| $y=x+2$ |  |  |
| $y=-\frac{1}{2} x+3$ |  |  |
| $y=\frac{4}{3} x$ |  |  |
| $y=7$ |  |  |
| $x=-2$ |  |  |
| $y+2=2 x-5$ |  |  |
| $2 y=2 x-5$ |  |  |

## Graphing Method \#2 - Using Slope

STEP \#1: Plot the $\qquad$
STEP \#2: Use the $\qquad$ to plot a second point

STEP \#3: Draw a line through the points

## Examples

a) $y=2 x+1$

b) $y=-\frac{1}{3} x-3$


## Assignment:

Graph each equation using the slope method. Show your work.

1) $y=\frac{4}{3} x+3$

2) $y+3=4 x$
3) $y=-x+6$


4) $y=-\frac{3}{2} x$

5) $y=-4$
6) $x+y=3+y$


## Practice Quiz:

1) Find the slope
a)
b)


A linear graph that goes through the points $(-3,1)$ and $(3,4)$
2) Analyze the equation

| Linear Equation: | Slope | Y-Intercept |
| :---: | :--- | :--- |
| $y=-2 x-5$ |  |  |

3) Graph the following equation using the slope method. Show your work.
$y=-\frac{2}{3} x+4$


## Name: teacher

## Lesson 6.2 - Slope Review

Definition of Slope: steepness of a line,

$$
\text { calculated using } \frac{\text { rise }}{\text { run }} \text { or } \frac{\text { change in } y \text {-value }}{\text { change in } x-\text { value }} \text { or } \frac{y_{2}-y_{1}}{x_{2}-x_{1}}
$$

|  |  |  |  |
| :---: | :---: | :---: | :---: |
| Slope $=$ Positive | Slope $=$ Negative | Slope $=0$ | Slope $=$ undefined |

Examples:

|  |  |
| :---: | :---: |
| Graph that goes through (-2,5) and (3,-1) | Graph that goes through (2,-4) and (2,7) |

## Graphing Method \#2 - Using Slope

STEP \#1: Plot the y-intercept
STEP \#2: Use the slope to plot a second point
STEP \#3: Draw a line through the points

## Examples

a) $y=2 x+1$

b) $y=-\frac{1}{3} x-3$


