## SLOPES

$\square$


## Special Slopes

$$
\begin{aligned}
\mathrm{m} & =\frac{\text { rise }}{\text { run }} \\
\mathrm{m} & =\frac{0}{8} \\
& =0
\end{aligned}
$$



$$
\begin{aligned}
m & =\frac{\text { rise }}{\text { run }} \\
M & =\frac{6}{0} \\
& =\text { undefined }
\end{aligned}
$$

The slope of horizontal lines is zero. The slope of vertical lines is undefined.

Match the graphs with the correct slope
A. zero
B.
undefined
C. negative
D. positive
1.

3.

2.

4.


Match the graphs with the correct slope
1.

3.

2.

4.


## Find the slope and $y$-intercept of the line below

$$
\text { Slope }=\frac{\text { rise }}{\text { run }}
$$



Slope $=$ $\qquad$
$y$-int $=$ $\qquad$

Find the slope and $y$-intercept of the line below


## Select all the answers that are correct.

A. In the equation $y=m x+b, b$ represents the slope.
B. In the equation $y=m x+b, b$ represents the $y$-intercept.
C. In the equation $y=m x+b, m$ represents the slope.
D. In the equation $y=m x+b, m$ represents the $y$-intercept.
E. A line has infinite slope because it depends on the points you choose.
F. A line has only one slope irrespective of the points you choose on the line.

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(F.) A line has only one slope irrespective of the points you choose on the line.

Antwan is painting all the rooms in his house this year. Below is a graph representing the relationship between quantity of paint and the area covered by the paint.

Paint Coverage


Find the slope of the line and describe it in words.

Antwan is painting all the rooms in his house this year. Below is a graph representing the relationship between quantity of paint and the area covered by the paint.

Paint Coverage


Slope $(\mathrm{m})=\frac{\text { rise }}{r u n}$

$$
\begin{aligned}
& m=\frac{1200-400}{3-1} \\
& m=\frac{800}{2}=400
\end{aligned}
$$

The slope means that one gallon of paint will cover an area of 400 square feet.

Line $t$ and $\triangle E C A$ and $\triangle F D B$ are shown on the coordinate plane.


Which statements are true? Select all that apply.
$\square$ The slope of $\overline{A C}$ is equal to the slope of $\overline{B C}$.
$\square$ The slope of $\overline{A C}$ is equal to the slope of $\overline{B D}$.
$\square$ The slope of $\overline{A C}$ is equal to the slope of line $t$.
$\square$ The slope of line $t$ is equal to $\frac{E C}{A E}$.
$\square$ The slope of line $t$ is equal to $\frac{F B}{F D}$.
$\square$ The slope of line $t$ is equal to $\frac{A E}{F D}$.

Line $t$ and $\triangle E C A$ and $\triangle F D B$ are shown on the coordinate plane.


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