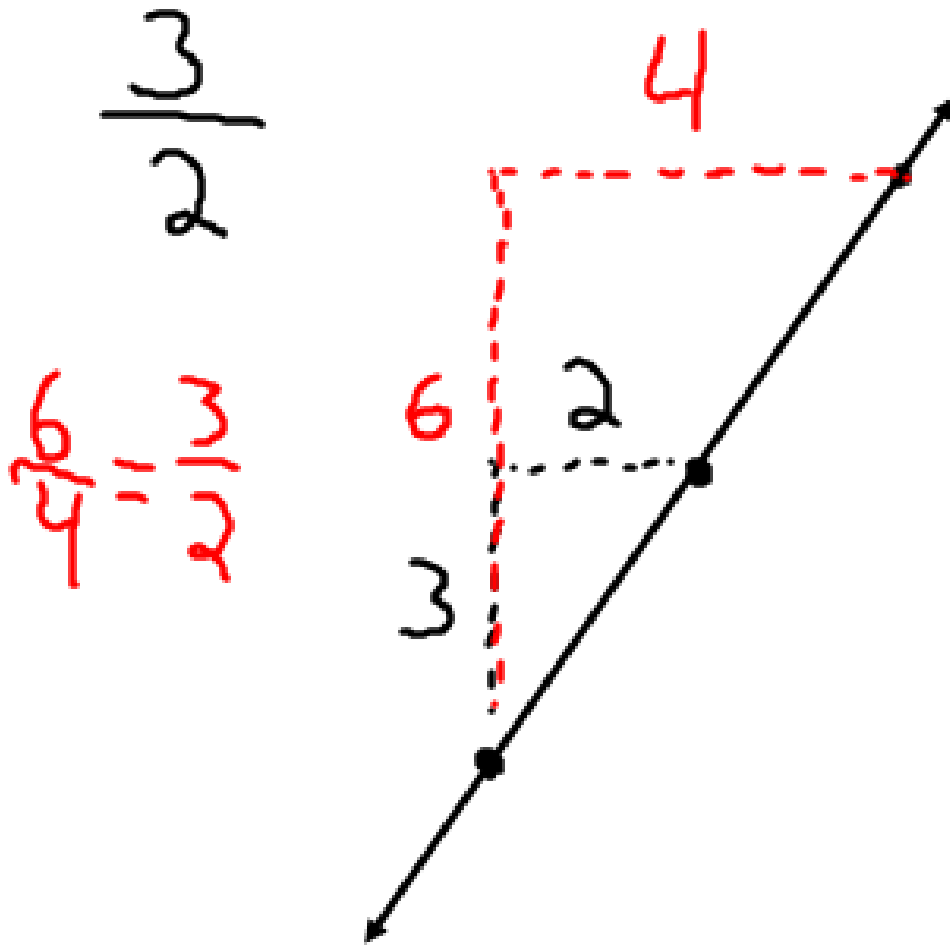


Section 13-1: Intro to Slope

How steep is this line?



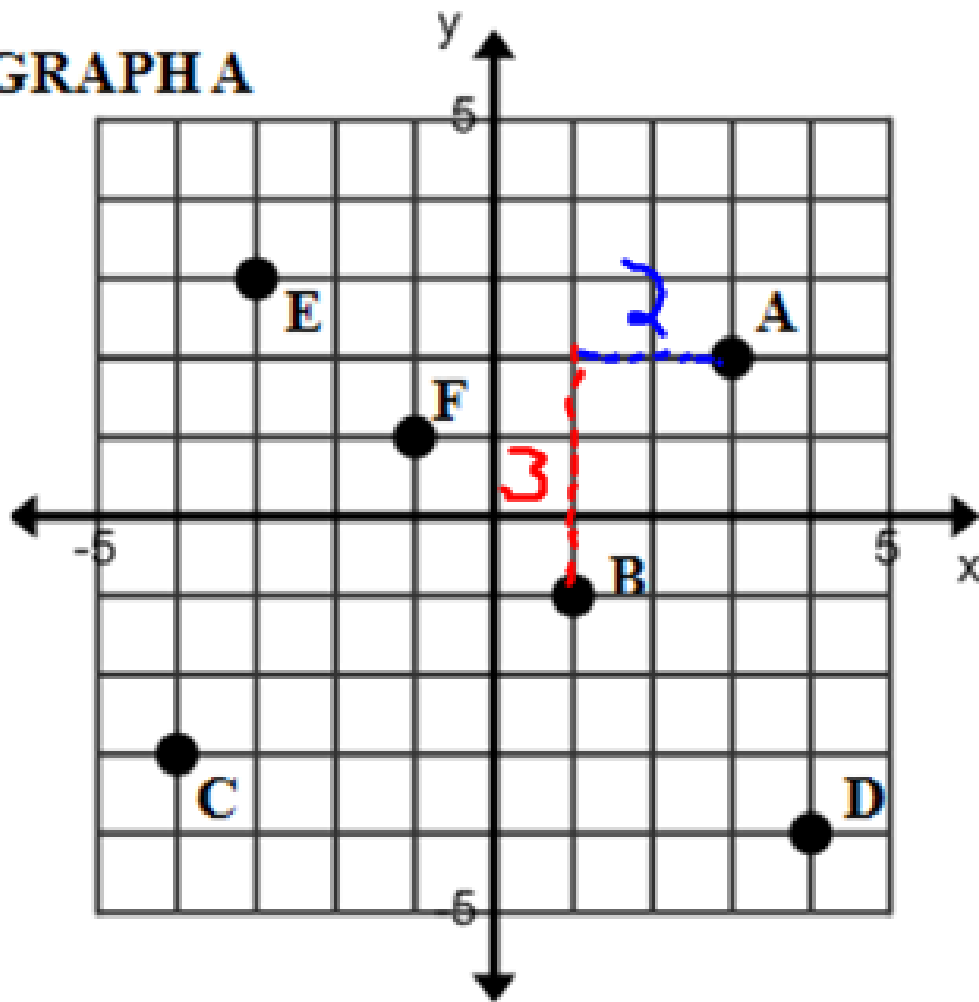
Slope means the steepness or slantiness of a line

$$\text{Slope} = \frac{\text{Rise}}{\text{Run}}$$

Rise is how many units it moves up/down.

Run is how many units it moves sideways.

GRAPH A



1. What is the rise from B to A?

3

2. What is the run from B to A?

2

3. What is the slope of line AB?

$$\frac{\text{Rise}}{\text{Run}} = \frac{3}{2}$$

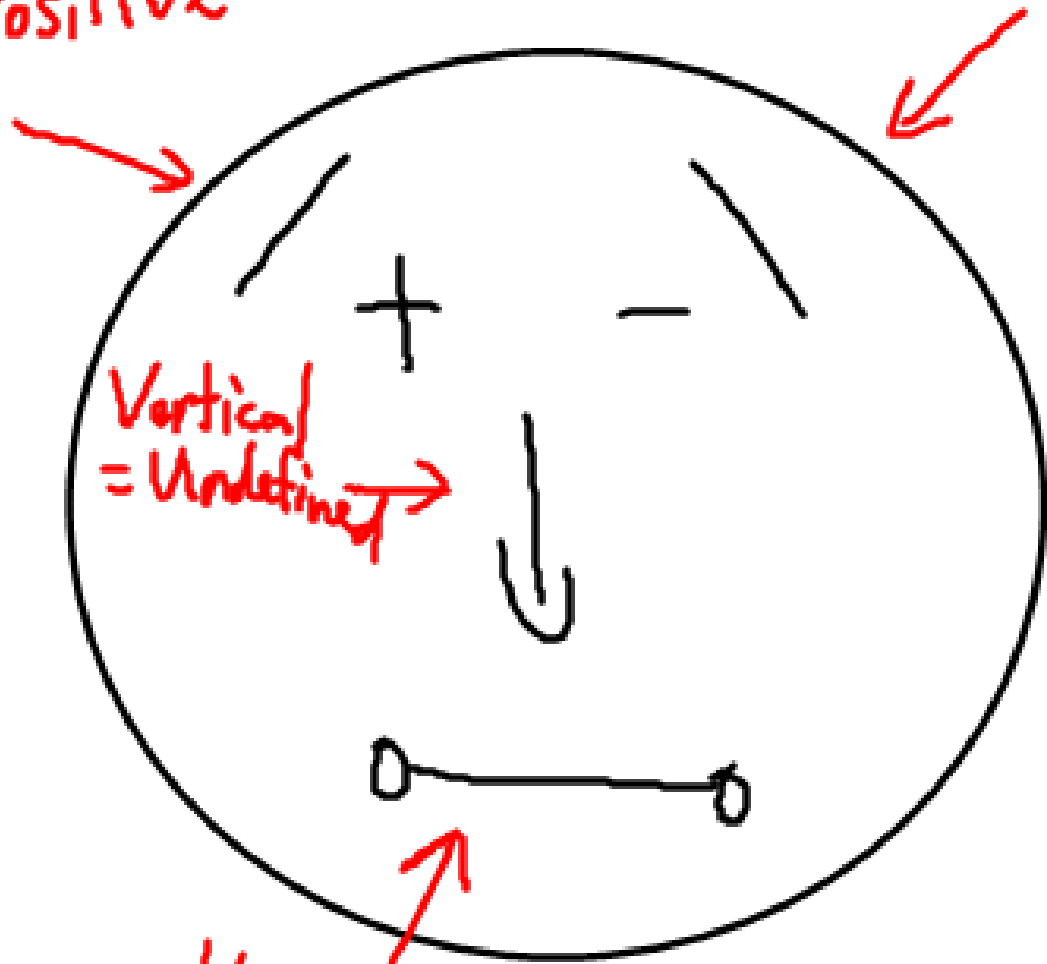
The slope is:

- a Positive # if the line goes uphill.
- a Negative # if it goes downhill.
- Undefined if the line is vertical.
- Zero if the line is horizontal.

Slope Face:

Uphill = Positive

Downhill = Negative



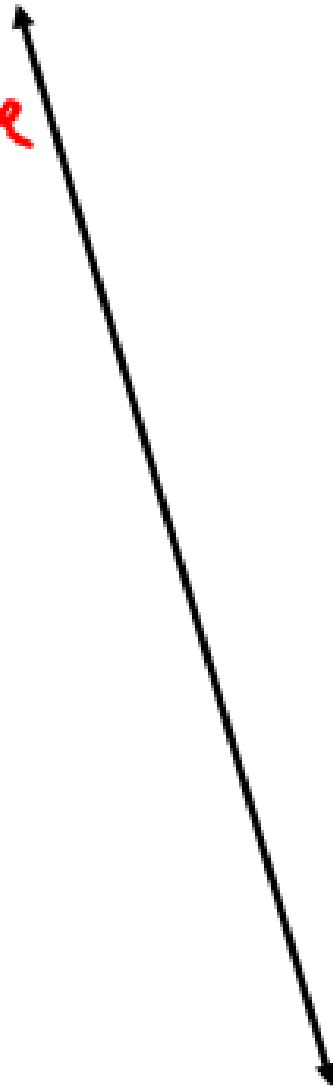
Vertical = Undefined

Horizontal = 0

Uphill means
Positive Slope



Downhill means
Slope is Negative

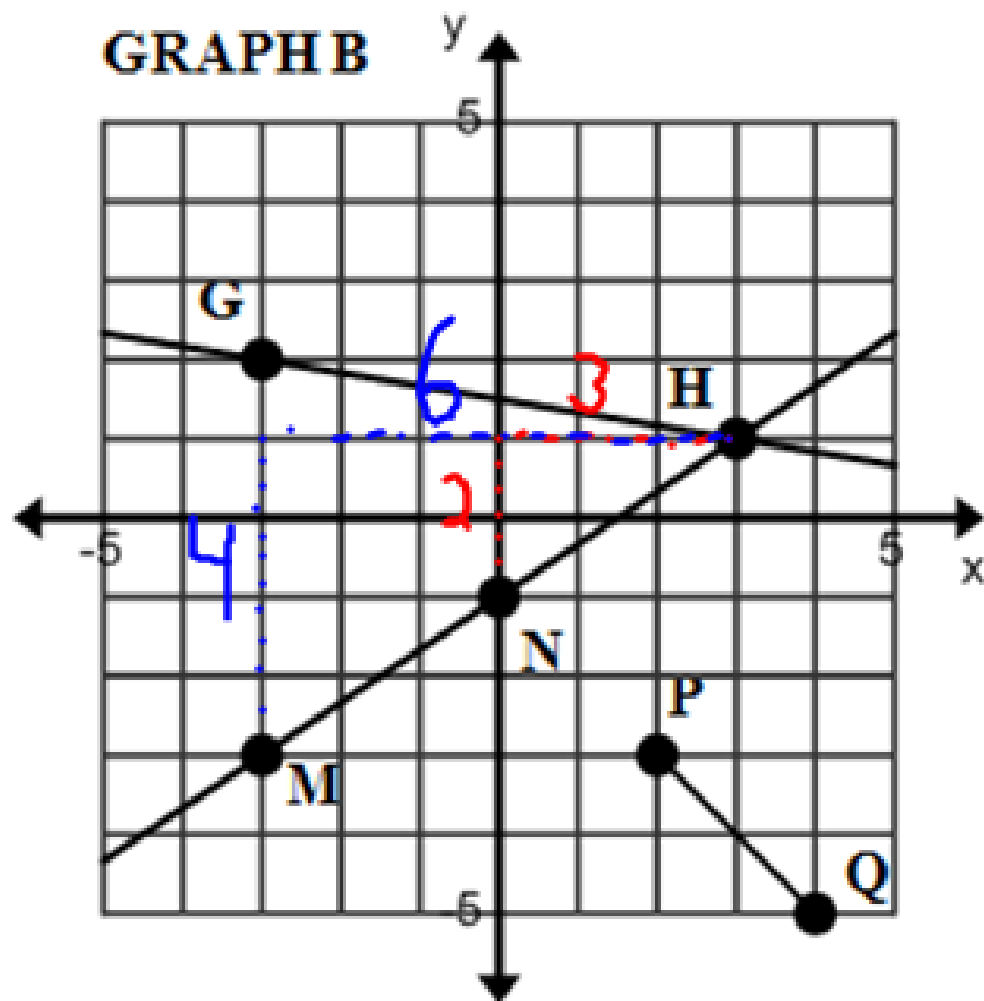


Vertical is
Undefined



Horizontal = 0





14. What is the slope of NH?

$$\frac{2}{3}$$

15. What is the slope of MH?

$$\frac{4}{6} = \frac{2}{3}$$

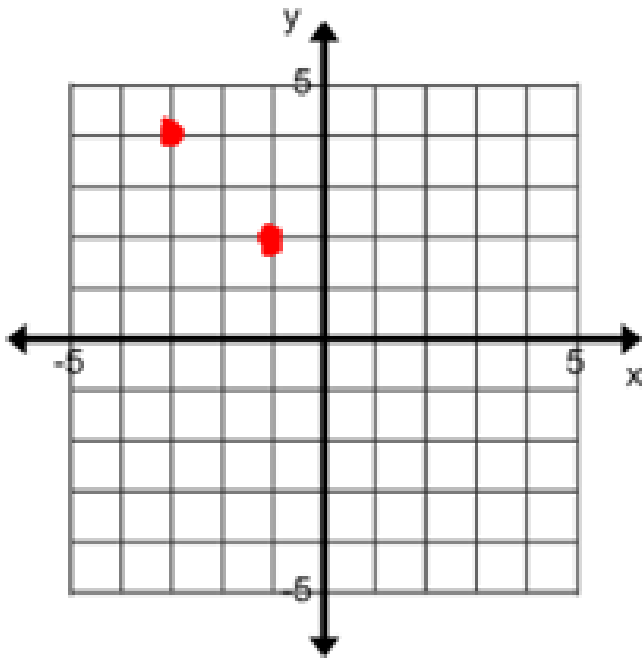
16. Why is the slope of MN, NH, and MH the same?

They are on the same line.

For 21-24, plot the points given and find the slope.

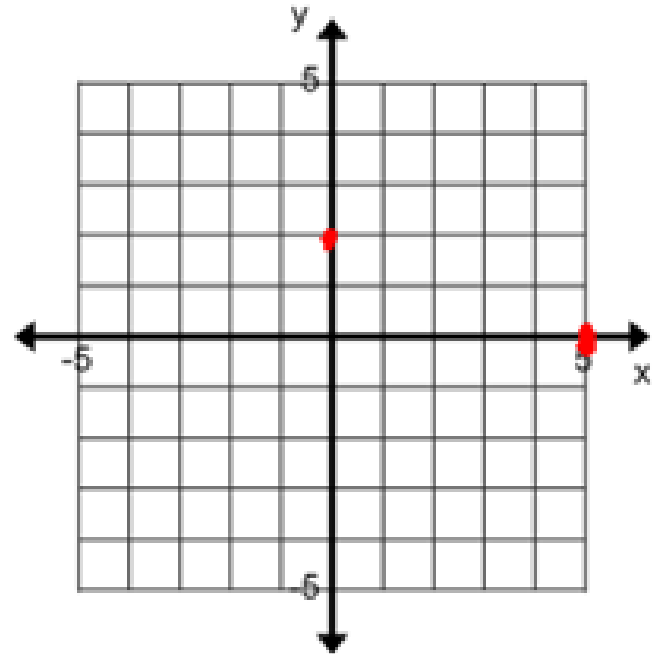
21. $(-1, 2)$ and $(-3, 4)$

Slope $\underline{-\frac{2}{2} = -1}$



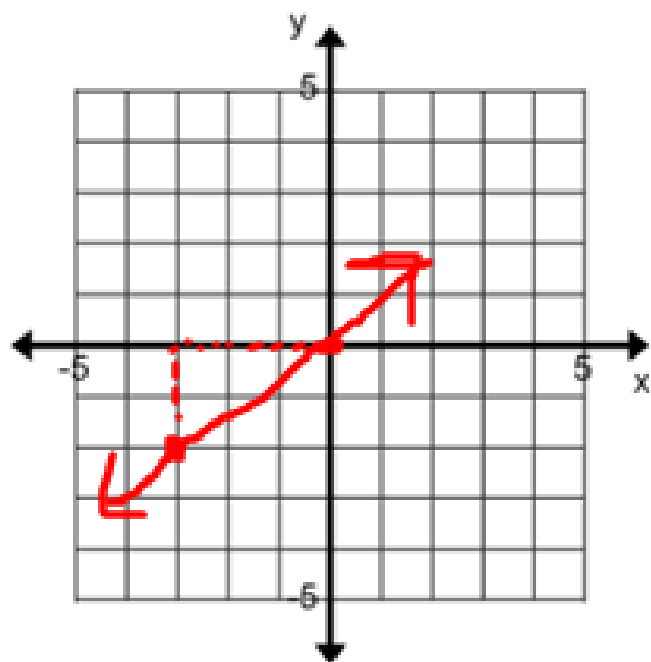
23. $(0, 2)$ and $(5, 0)$

Slope $\underline{-\frac{2}{5}}$



17. Place a point at $(-3, -2)$.

From this point, draw a line with a slope of $\frac{2}{3}$.



19. Place a point at $(-2, 3)$.

From this point, draw a line with a slope of $-\frac{2}{5}$.

