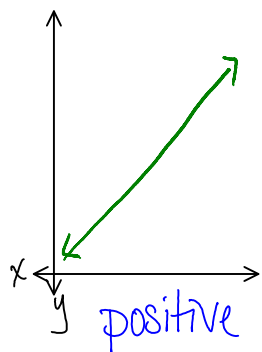


11/13

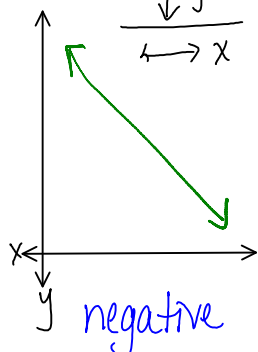
Tuesday, November 13, 2012
11:08 AM

Slope

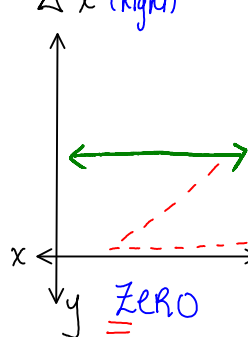
"rise over run"
 $\frac{\Delta y}{\Delta x}$ (right) ^{change}



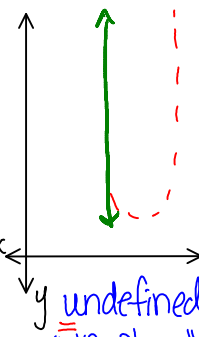
positive



negative



Zero

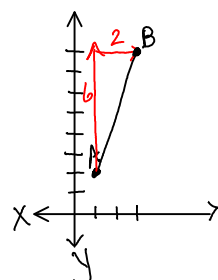


undefined
"NO slope"

Read from left to right

Exs:

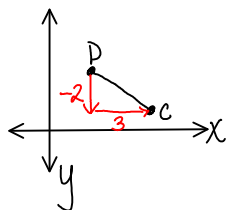
① A(1,2) B(3,8) Find the slope.



*pos. *up/down 1st, then Right 2nd

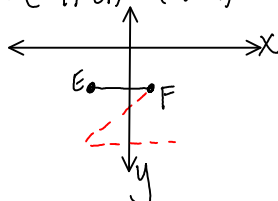
$$\text{slope} = \frac{6}{2} = \frac{3}{1} = 3$$

② C(5,1) D(2,3)



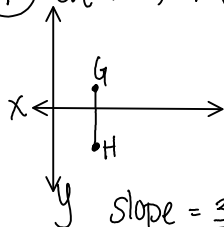
*neg. slope = $-\frac{2}{3}$

③ E(-2,-2) F(1,-2)



$$\text{slope} = \frac{0}{3} = 0$$

④ G(2,1) H(2,-2)



$$\text{slope} = \frac{3}{0} = \text{no slope (und.)}$$

Slope Formula (don't need graph paper)

$$\text{slope} = \frac{y_2 - y_1}{x_2 - x_1}$$

*pick from the same pt. template

und.
S

m

ex: ① $(4, -3)$ $(2, 3)$ Find slope.

$$\frac{-6}{4-2} = \frac{-6}{2} = -3 \quad \swarrow \text{neg.}$$

$$m = \frac{-3 - 3}{-}$$

② $(5, 2)$ $(5, -1)$ Find slope.

$$m = \frac{2 - (-1)}{5 - 5} = \frac{3}{0} = \text{undef.}$$

