

Algebra 1 3.3

Use rate of change to solve problems

*8th grade standard

Find the slope of a line*

rate of change $\frac{y}{x}$
slope

positive slope

negative slope

zero slope

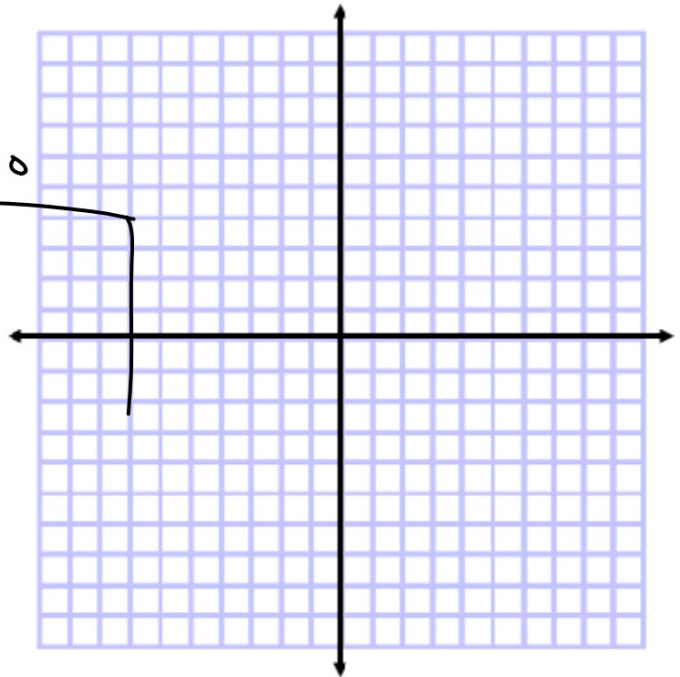
undefined slope

constant

linear

whiteboards

slope song



Activity: Connect 4 and/or Bingo (if time)

Whiteboards

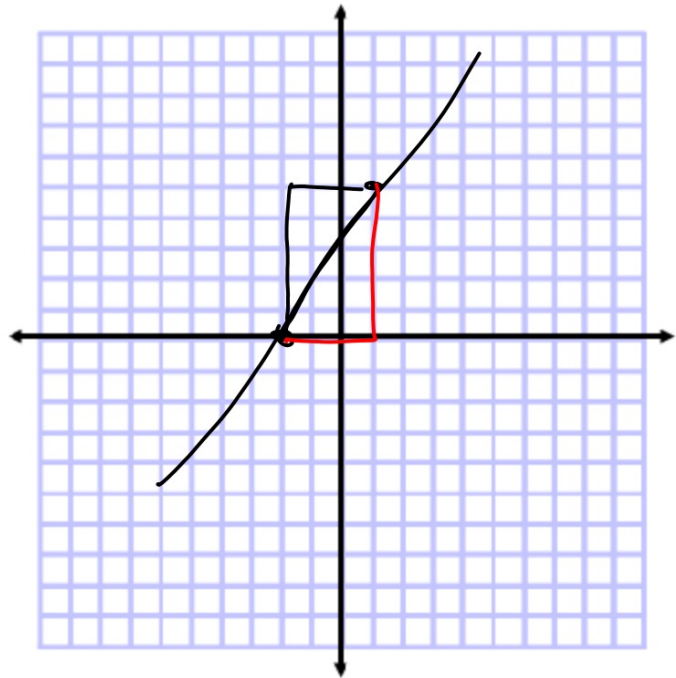
Example 4 Positive, Negative and Zero Slope

Find the slope of a line that passes through each pair

a. $(-2, 0)$ and $(1, 5)$

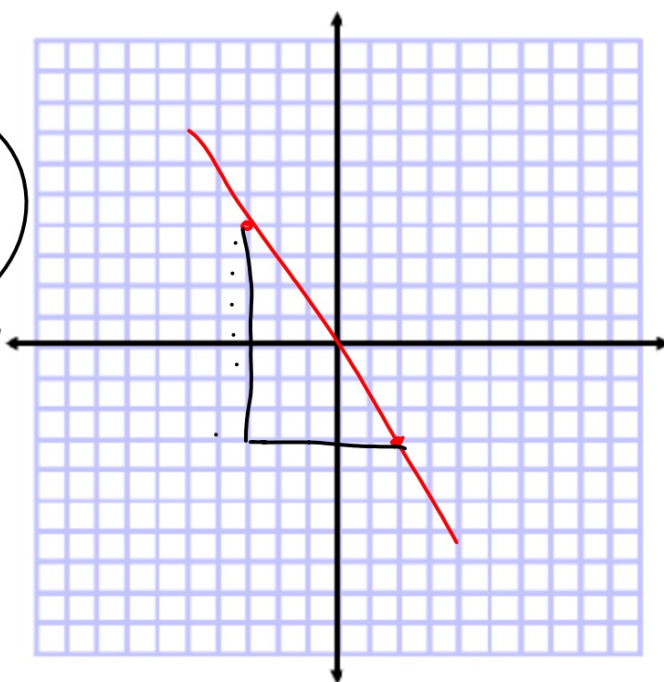
$$\frac{5}{3} = -\frac{5}{-3}$$

~~$= \frac{2}{3}$~~

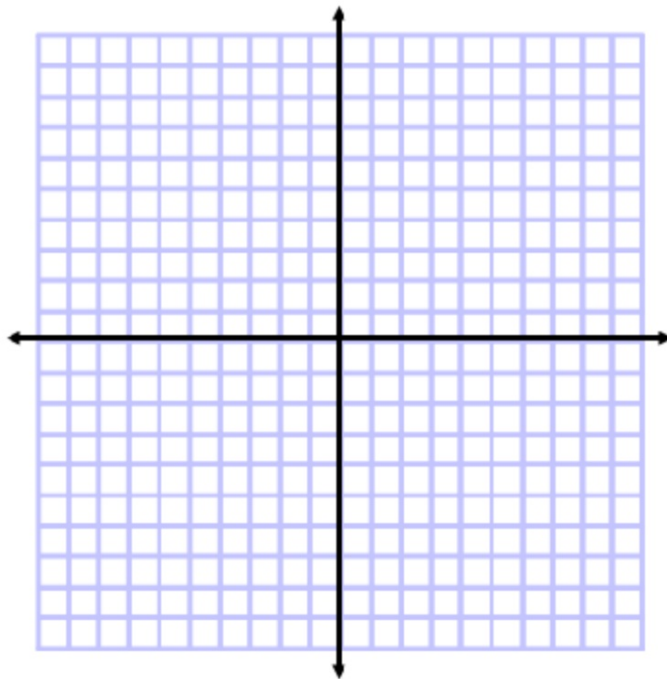


b. $(-3, 4)$ and $(2, -3)$

$\frac{-7}{5}$ ~~$\frac{7}{-5}$~~



c. $(-3, -1)$ and $(2, -1)$



Guided Practice

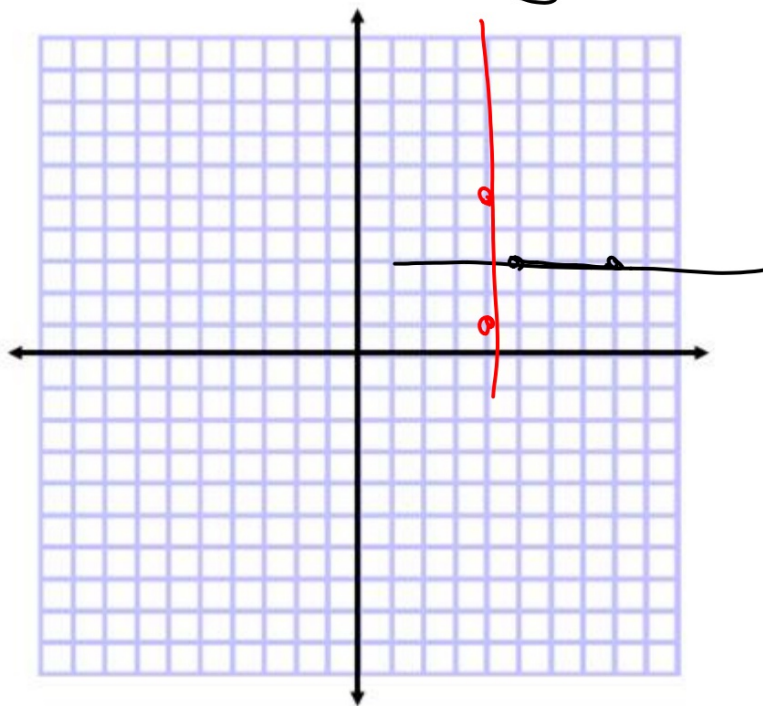
Find the slope of the line that passes through each pair of points.

4A. (3, 6), (4, 8)

4B. (-4, -2), (0, -2)

4C. (-4, 2), (-2, 10)

$$(5, 3) (8, 3) = \frac{0}{3} = 0$$



$$(4, 1) (4, 5) \\ \frac{4}{0} = \text{undefined}$$

Pop. of Sioux Falls

2025 200,000

2017 185,000

+ 15,000

8

1875

1

i phone Sales

2024 750,000,000

2012 300,000,000

$$= \frac{450,000,000}{12}$$

$$= \frac{37,500,000}{1}$$