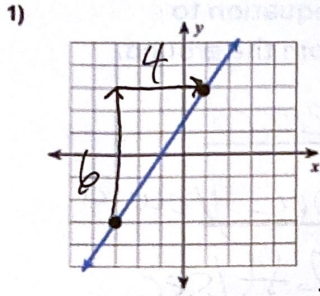


Slope (Rate of Change) WS#1

For each graph, table, or situation, find the slope (rate of change) of the line. For graphs and tables, show your work and simplify your answers, where possible.

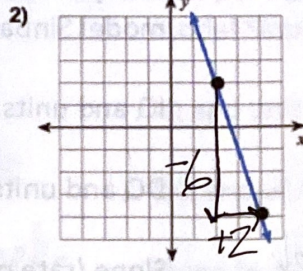


Slope (rate of change): $\frac{3}{2}$

(see start of work on graph)

Work:

$$\frac{6}{4}$$

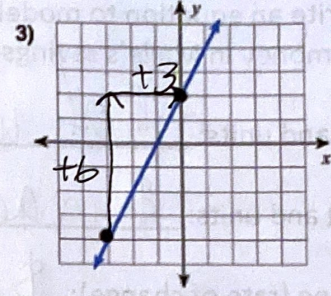


Slope (rate of change): -3

(see start of work on graph)

Work:

$$-\frac{6}{2}$$



Slope (rate of change): 2

(see start of work on graph)

Work:

$$\frac{6}{3}$$

4)

x	y
4	-13
-3	8
12	-37
-11	32

Slope (rate of change): -3

Work:

$$\frac{-13-8}{4-(-3)} = \frac{-21}{7}$$

5)

x	y
2	3
-4	-21
8	27
-1	-9

Slope (rate of change): 4

Work:

$$\frac{3-(-21)}{2-(-4)} = \frac{24}{6}$$

6)

x	y
-3	6
9	-2
12	-4
-6	8

Slope (rate of change): $-\frac{2}{3}$

Work:

$$\frac{6-(-2)}{-3-9} = \frac{8}{-12}$$

Slope (Rate of Change) WS#1, page 2

7) Maile is saving \$25 per week, and started with \$375 in her savings account. Write an equation to model the amount of money in Maile's savings account.

IQ and units: # of weeks

DQ and units: \$ in account

Slope (rate of change): \$ 25/week

8) Sinbad the squirrel is 24 feet up in a tree and is climbing down at a rate of 2 feet per second. Write an equation to model Sinbad's distance from the ground.

IQ and units: # of seconds

DQ and units: ft above ground

Slope (rate of change): -2 ft/sec

9) Mighty Mouse is 1,200 feet below the surface of the ocean and is zooming to a ship on the surface at 200 feet per second to save Penelope Pureheart from Oil Can Harry. Write an equation to model Mighty Mouse's position relative to the surface of the ocean.

IQ and units: # of seconds

DQ and units: position relative to surface (ft)

Slope (rate of change): 200 ft/sec

12	15
8	8

12	8
8	1

12	15
8	8

Handwritten calculations for slope: $\frac{8-12}{8-15} = \frac{-4}{-7} = \frac{4}{7}$