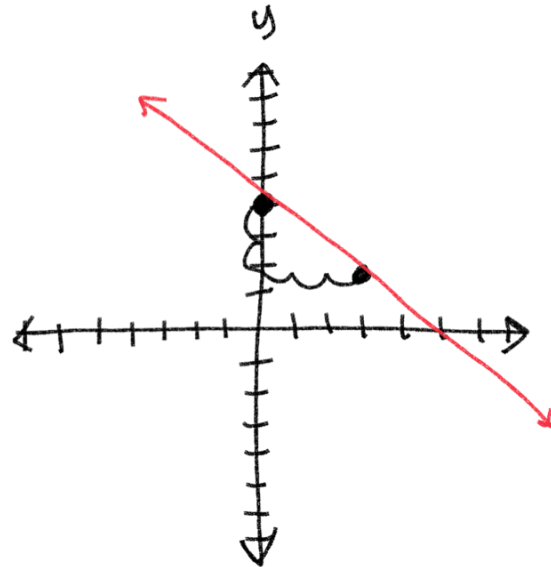


T-A1 Algebra 1 Week 27

$$y = \boxed{-\frac{2}{3}}x + \textcircled{4}$$

slope
y-intercept

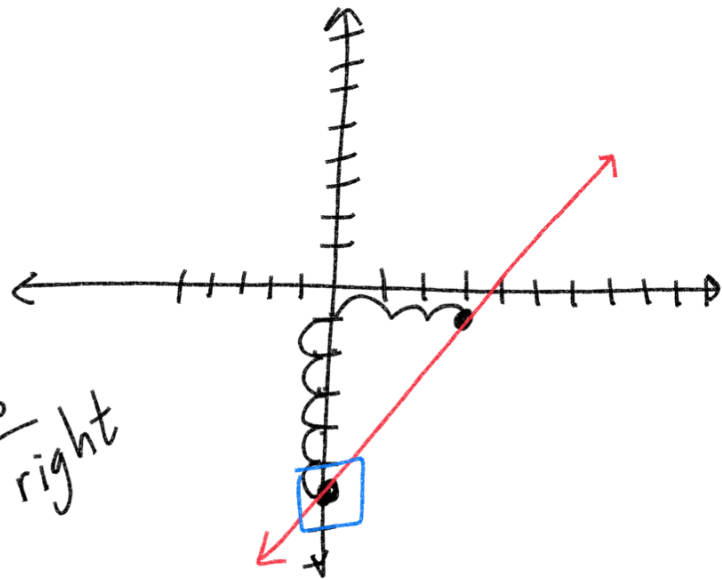
slope = $-\frac{2}{3} = \frac{\text{down } 2}{3 \text{ right}}$



$$y = \textcircled{\frac{5}{3}}x + \boxed{-6}$$

slope
y-int

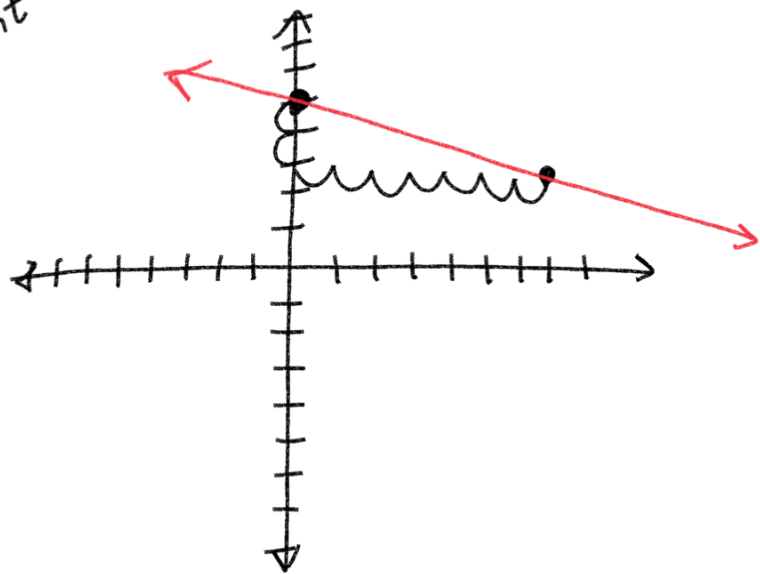
rise / run = $\frac{5}{3}$ + up down
right
3 right



$$y = \frac{-2}{7}x + \textcircled{5}$$

y-int

slope = $\frac{-2}{7} \rightarrow \frac{\text{down } 2}{7 \text{ right}}$



Function Rules

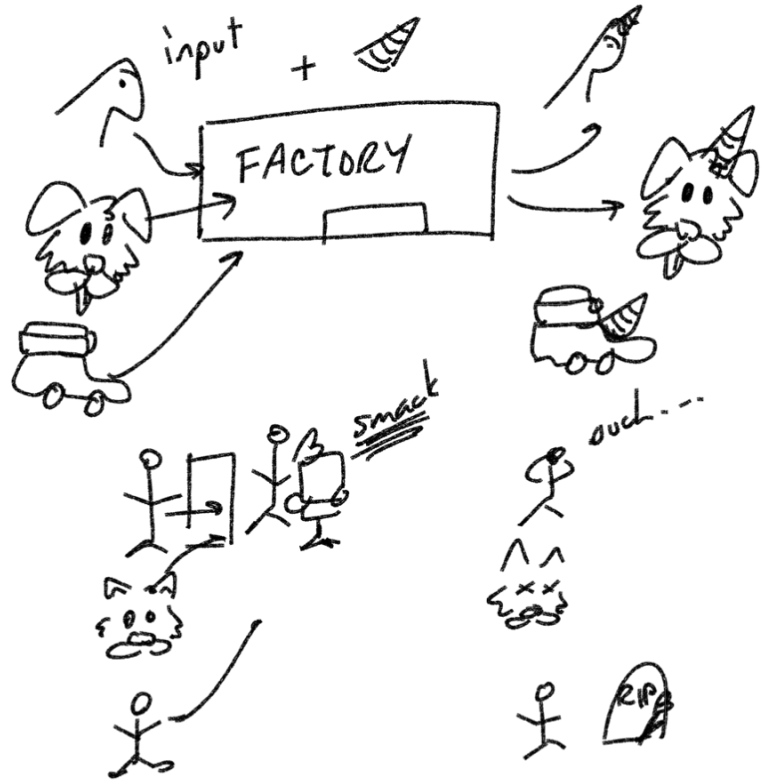
input x	output y
-3	12
2	-8
8	-32

$$x * -4 = y$$

$$y = -4x$$

x	y
-3	-8
-1	-6
3	-2

$$x - 5 = y$$



①

x	y
-6	2
-3	5
4	12

$$x + 8 = y$$

Find function ②

Rules

x	y	y/x
18	-12	$-\frac{12}{18} = -\frac{2}{3}$
6	-4	$-\frac{4}{6} = -\frac{2}{3}$
-3	2	$\frac{2}{-3} = -\frac{2}{3}$

$y = kx$
 $k = \frac{y}{x}$

$$y = -\frac{2}{3}x$$

no, not direct variation

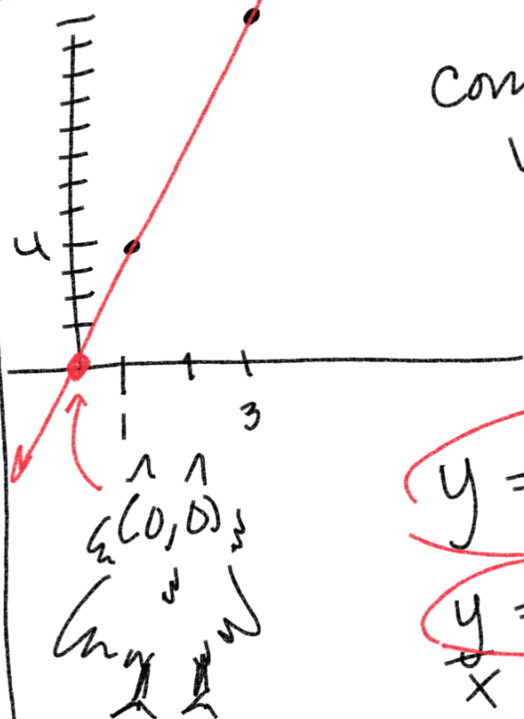
$$y = kx$$

direct variation

Constant of variation

Direct Variation

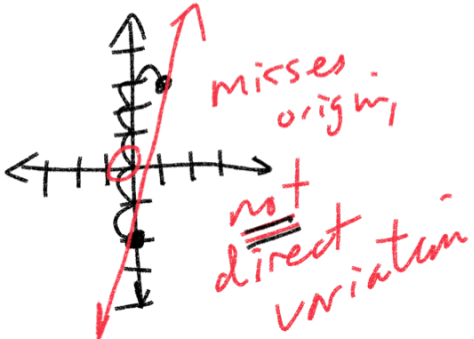
(+) Nuggies	\$(y)	$\frac{y}{x}$	k
1	\$4	$\frac{4}{1}$	4
3	\$12	$\frac{12}{3}$	4
7	\$28	$\frac{28}{7}$	4
125	\$500	$\frac{500}{125}$	4
0	\$0		



$$y = kx$$

$$y = \frac{kx}{x}$$

$$y = 4x \quad k = \frac{y}{x}$$



$$y = \frac{2}{3}x \text{ direct variation}$$

$$y = 5x - 2 \text{ not direct variation}$$

slope $\frac{5}{1}$ up 5 right 1

Direct Variations

$$y = kx$$

$$k = \frac{y}{x}$$

x	y	$\frac{y}{x}$	k
-8	4	$\frac{4}{-8} = -\frac{1}{2}$	$-\frac{1}{2}$
-6	3	$\frac{3}{-6} = -\frac{1}{2}$	$-\frac{1}{2}$
4	-2	$\frac{-2}{4} = -\frac{1}{2}$	$-\frac{1}{2}$

x	y	$\frac{y}{x}$	k
-3	12	$\frac{12}{-3} = -4$	-4
2	-8	$\frac{-8}{2} = -4$	-4
4	-12	$\frac{-12}{4} = -3$	-3

$$y = kx$$

$$y = -\frac{1}{2}x$$

Not direct variations

$$y = 2x + 5$$

not direct variations

$$8x + 2y = 0$$

$$-8x$$

$$2y = -8x$$

$$\frac{2y}{2} = \frac{-8x}{2}$$

$$y = -4x$$

$$k = -4$$

HW

Ch 5-5
1-12, 25-28

No supplemental WS
Online HW 27
Quiz 27

due April 27th

$$y = kx$$

HW/Quiz 25 due tonight
HW/Quiz 26 due April 20th

