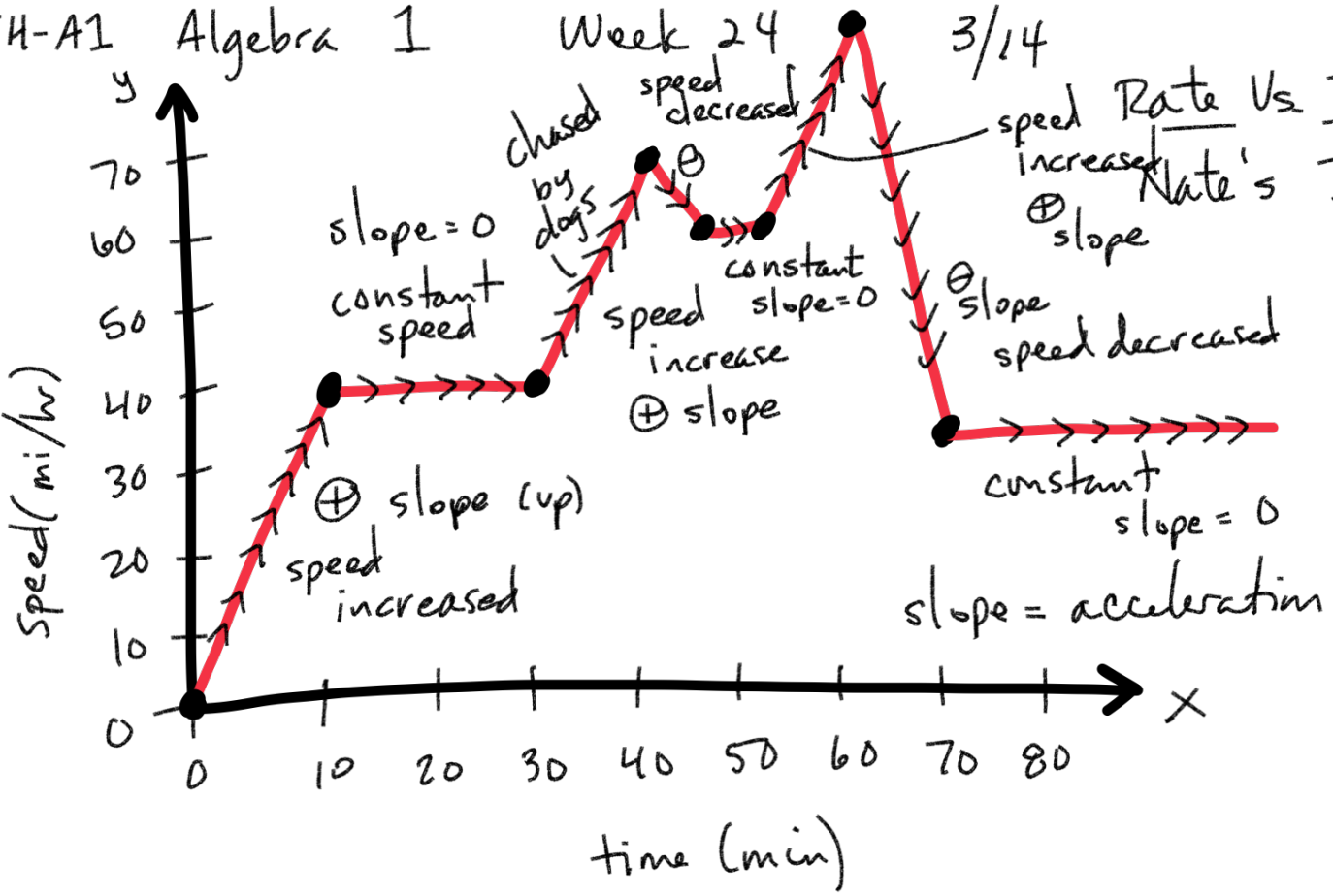
TH-A1 Algebra 1 Week 24 3/14

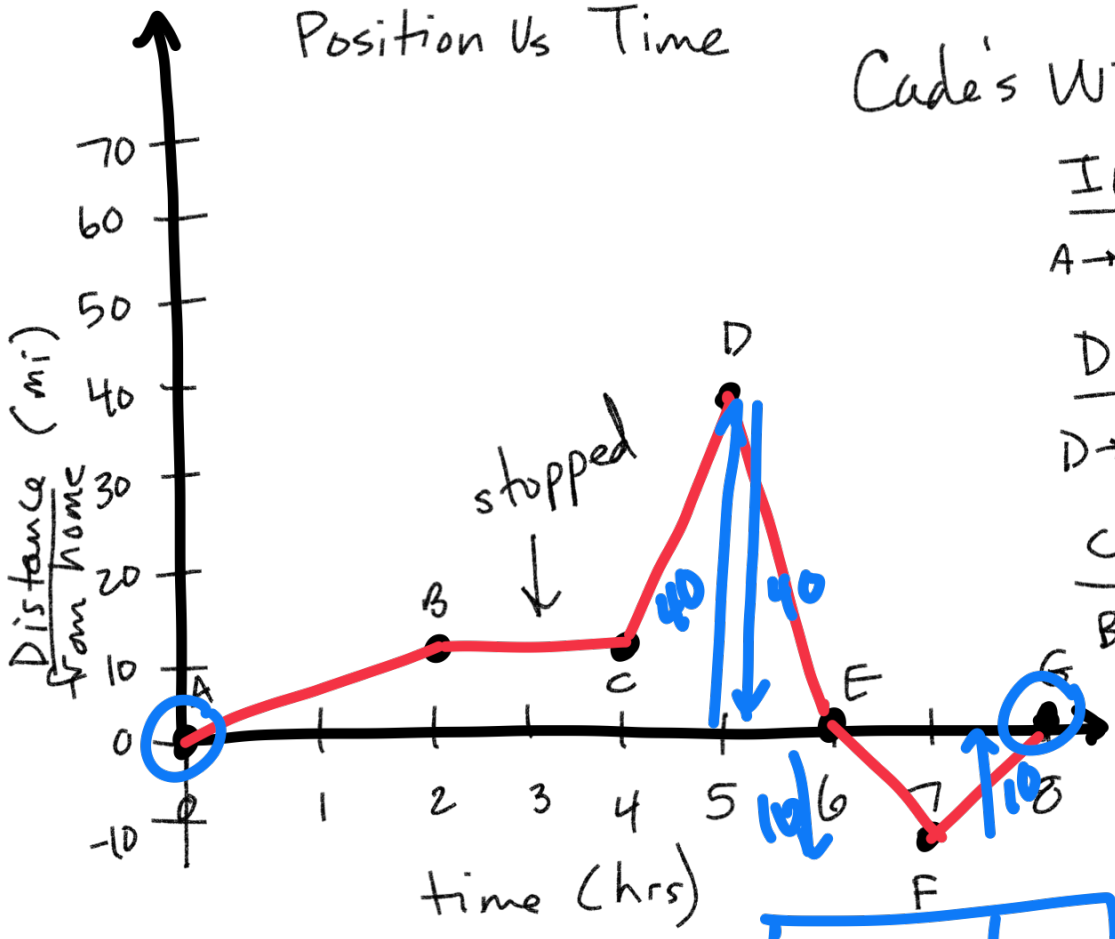
Rate Vs Time

Nate's Jog



Position Vs Time

Cade's Wild Ride



Increasing ⊕

A → B, C → D, F → G

Decreasing ⊖

D → E, E → f

constant

B → C

What is the total distance traveled?

40 + 40 + 10 + 10 = **100 miles**

Input / Output Functions

input → independent (x)
output → dependent (y)

input of samiches	output $ $
1	$5
2	$10
5	$25
28	$140

Not a function

Every one input must have one, and only one, output.

Function must be predictable

buffet

# of plate	$ $
1	$12
2	
5	
82	

Function

Multiple inputs can return the same output

One input leads to one, and only one, output

1)

input x	output y
1	2
3	8
4	

function

yaw!

2.)

x	y
0	4
2	8
3	10

Naw!

Not function

$x \rightarrow$ input $\rightarrow$ independent variable

$y \rightarrow$ output $\rightarrow$ dependent variable

ordered pairs (x, y)

Each input must have one output

1.) $(1,3), (2,4), (3,5), (4,5)$ function.

2.) $(2,7), (3,9), (3,12), (5,12)$ Now! Not function

3.) $(0,5), (1,3), (0,5), (2,8), (3,1)$ Yay! function

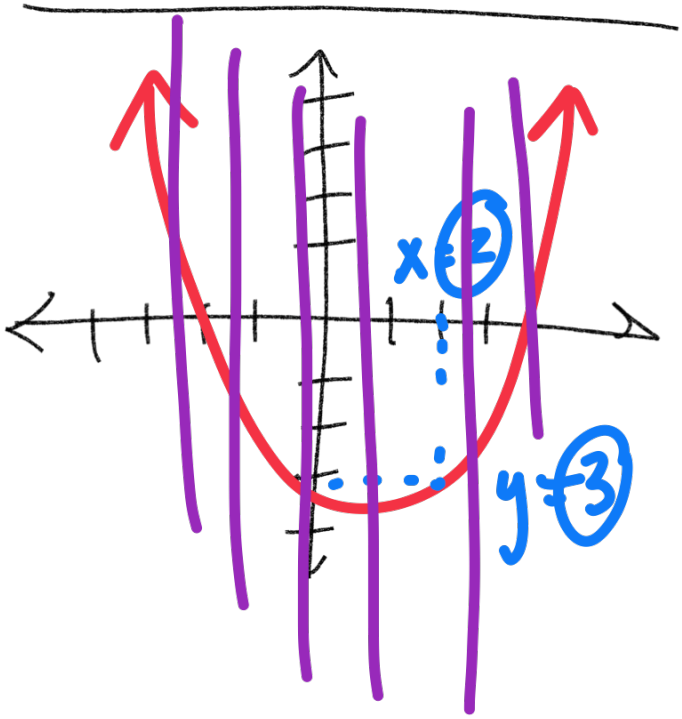
Domain $\rightarrow$ all inputs $\rightarrow$ all x values

Range $\rightarrow$ all outputs $\rightarrow$ all y values (x, y)

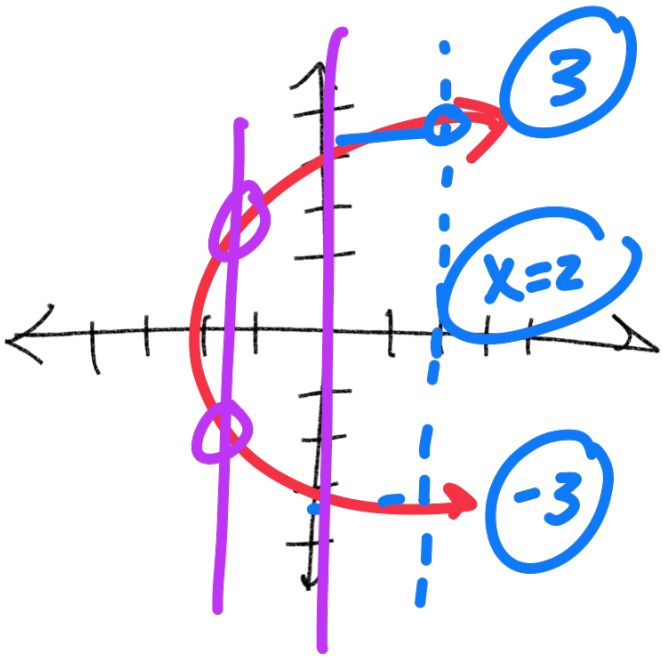
$(2,8), (3,12), (4,16), (6,22)$

Domain $\{2, 3, 4, 6\}$ Range: $\{8, 12, 16, 22\}$

Vertical Line Test



function
input → 1 output



Not function

Function or naw?

(1, 2), (2, 3), (2, 4), (3, 5), (4, 6)

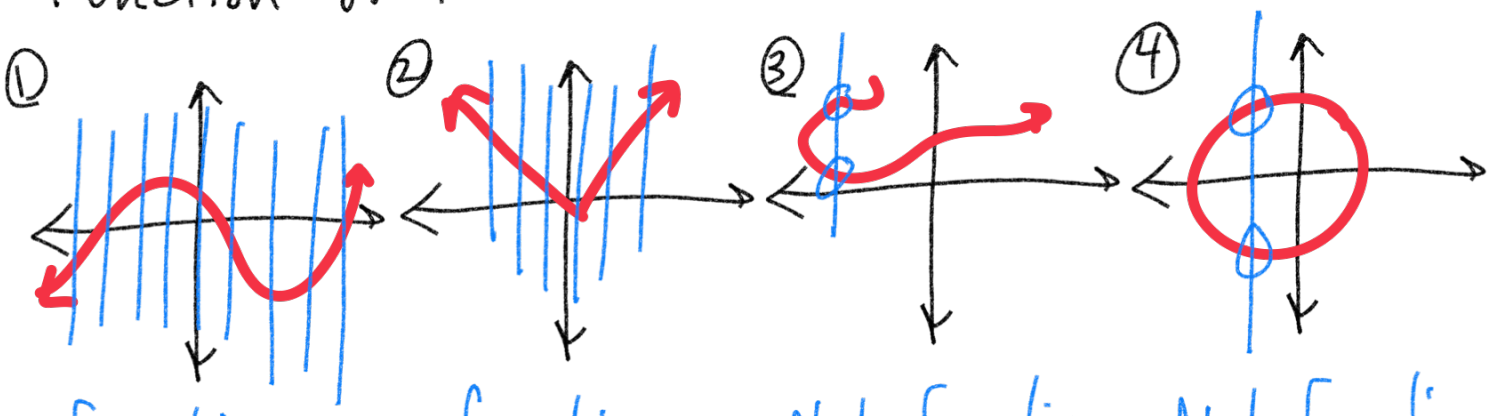
Naw! Not function

Find domain and range

(0, -3), (1, 8), (2, 32), (5, 78)

Domain $\{0, 1, 2, 5\}$ Range $\{-3, 8, 32, 78\}$

Function or Naw?



function function Not function Not function