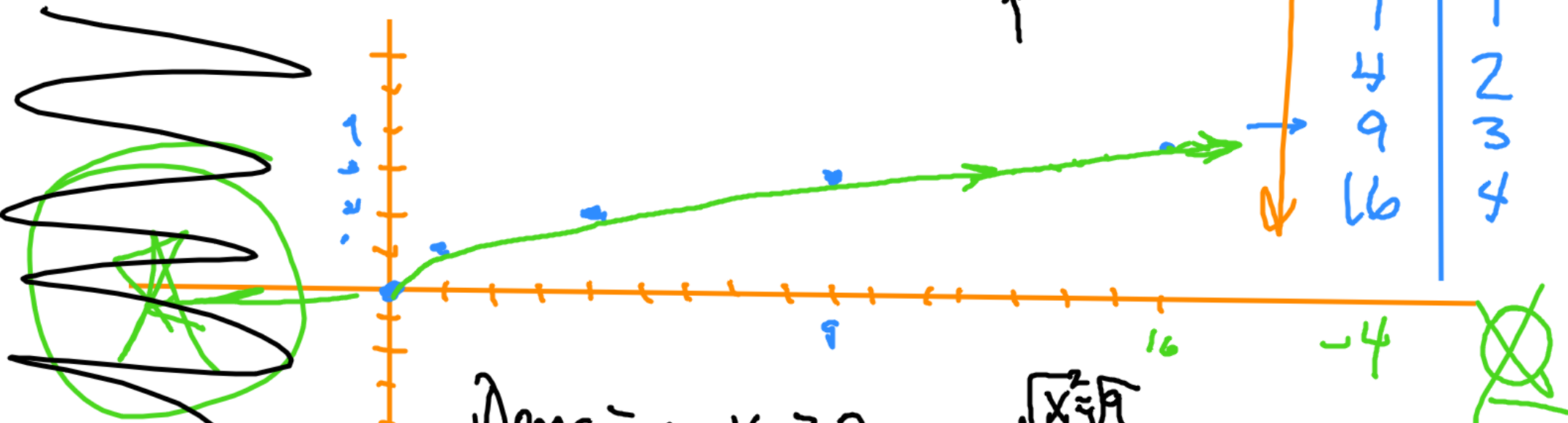


SQUARE ROOT FUNCTION

$$f(x) = \sqrt{x}$$



x	y
0	0
1	1
4	2
9	3
16	4



Domain: $x \geq 0$

Range: $y \geq 0$

$$\sqrt{x^2} = |x|$$

$$x \neq \pm 3$$

~~$$\sqrt{9} = -3$$~~

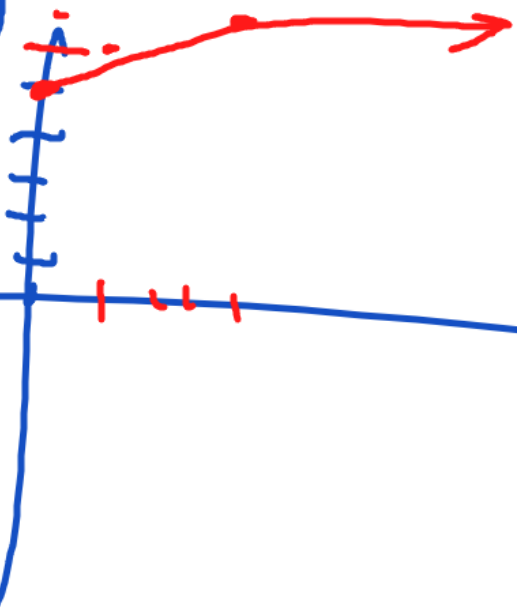
~~x is
negative~~

$$y = \sqrt{x} + c$$



Shift up/down "c"

$$y = \sqrt{x} \pm 5$$

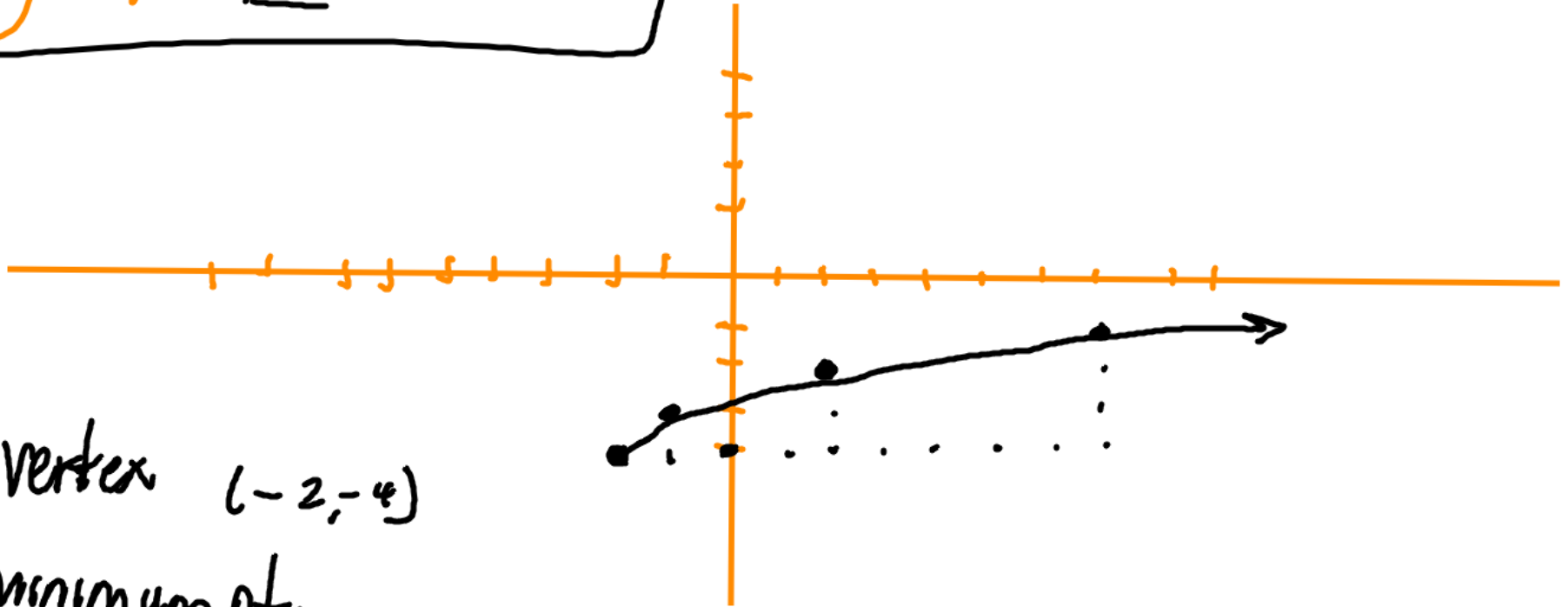


$$y = \sqrt{x \pm b}$$

Shifts left (+) b units
right (-)

$$y = \sqrt{x+2} - 4$$

(0,0)



vertex $(-2, -4)$

minimum pt.
(ORIGIN)

Option 1: p415 5-8, 22-28, 40

Option 2: WS 6.8

Option 3: KWA Radical Functions
1, 2, 5-8, 11