

Homework Review - 10.8

① ②

⑮	x	-2	-1	0	1	2
	y	-5	-2	1	4	7

3 3 3 3

linear equation

$$y = mx + b$$

$$y = 3x + b$$

$$-5 = 3(-2) + b$$

$$-5 = -6 + b$$

$$+6 \quad +6$$

$$1 = b$$

$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

$$m = \frac{7 - 4}{2 - 1} = \frac{3}{1} = 3$$

$$y = 3x + 1$$

(17) x -1 $\rightarrow 0$ 1 2 3
 y 16 4 1 $\frac{1}{4}$ $\frac{1}{16}$ exp.

$\frac{16}{4} = 4$ $\frac{4}{1} = 4$ $\frac{1}{\frac{1}{4}} = 4$ $\frac{\frac{1}{4}}{\frac{1}{16}} = 4$

$$y = ab^x$$

$$4 = ab^0$$

$$4 = a(1)$$

$$4 = a$$

$$y = 4\left(\frac{1}{4}\right)^x$$

$$b^0 = 1$$

$$b^1 = b$$

$$y = 4b^x$$

$$1 = 4b^1$$

$$\frac{1}{4} = \frac{4b}{4}$$

$$\frac{1}{4} = b$$

⑬

x	-2	-1	0	1	2	
y	-4	-1	0	-1	-4	Quad.

$$ax^2 + bx + c = y$$

$$ax^2 = y$$

$$a(0)^2 = 0$$

$$0 = 0 \checkmark$$

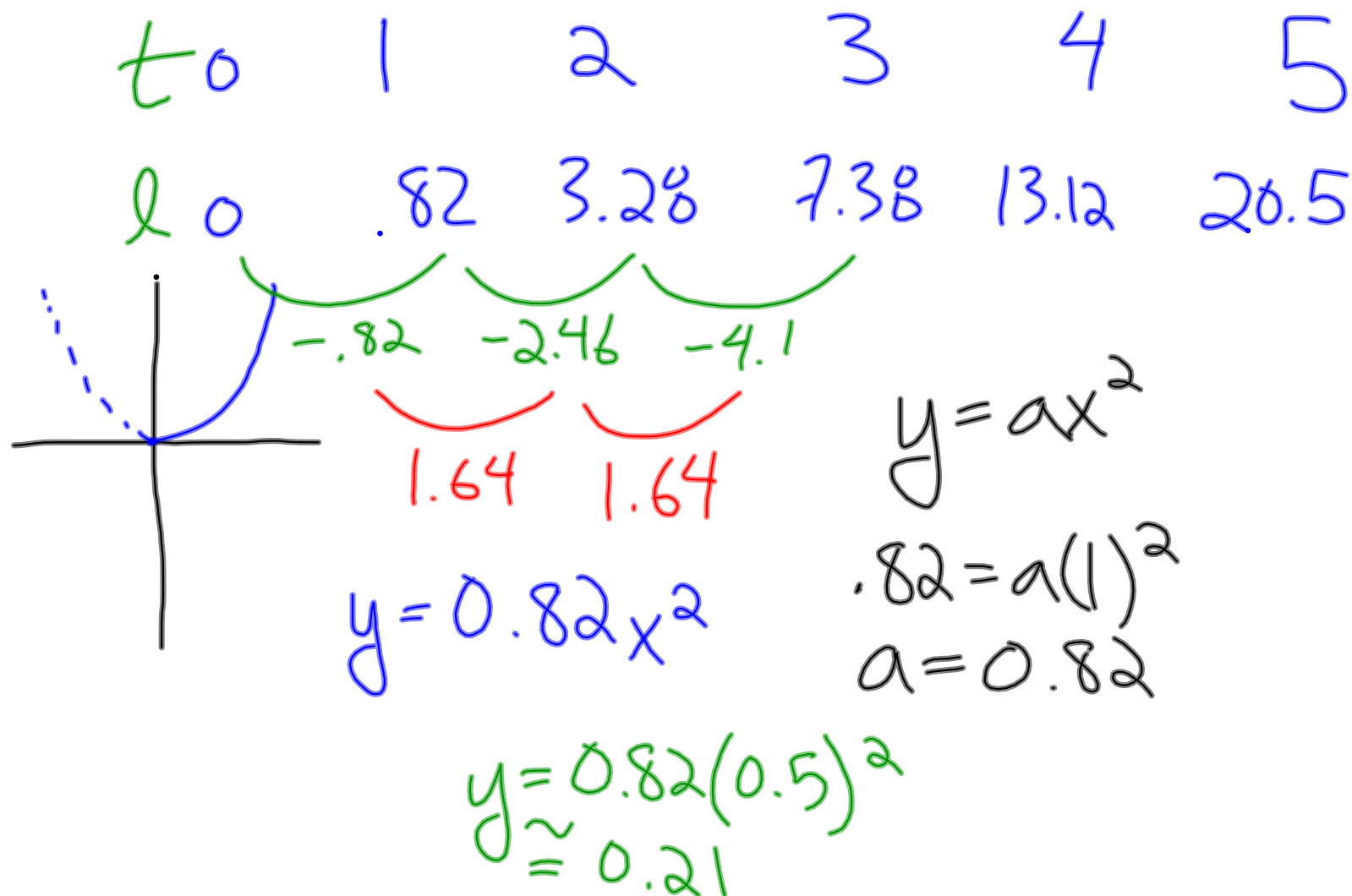
$$a(1)^2 = -1$$

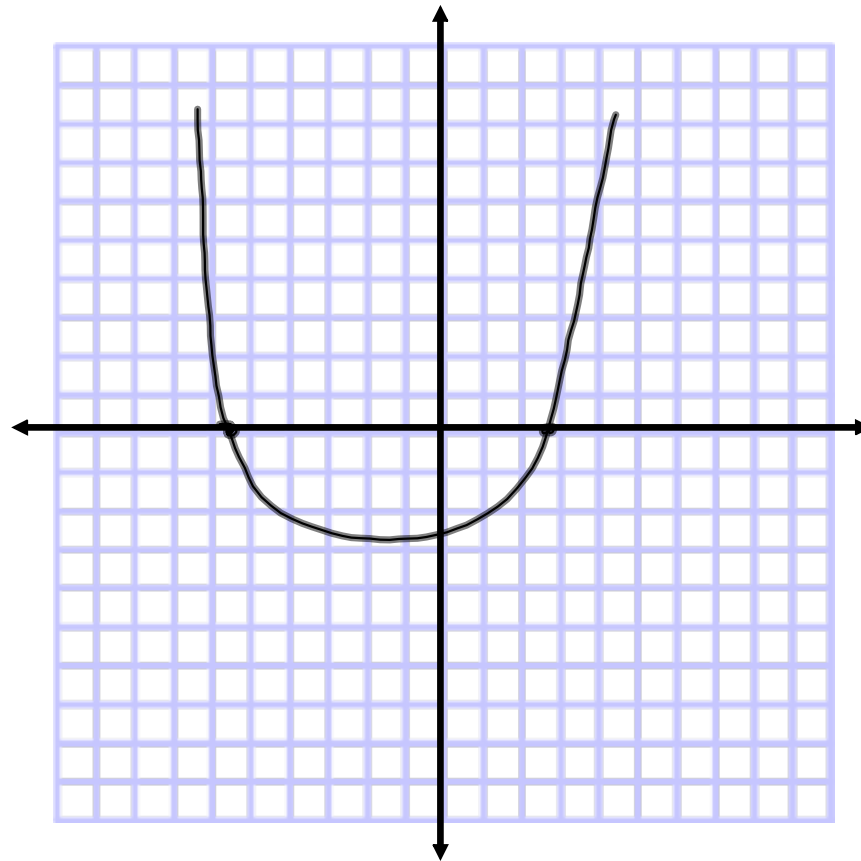
$$a(1) = -1$$

$$\boxed{a = -1}$$

$$(-1)x^2 = y$$

$$\boxed{-x^2 = y}$$





$$x = -5.5, x = 2.7$$

Review Questions:

p. 696, 5-19 odd, 25-29 odd, 30, 37, 38

p. 704, 1, 3

Optional Study Questions:

p. 701, 1-5 odd, 11-23 odd, 24, p. 705 9, 11