CUBE ROOT FUNCTION

$\sqrt[3]{64} = 4$ because $4^3 = 64$

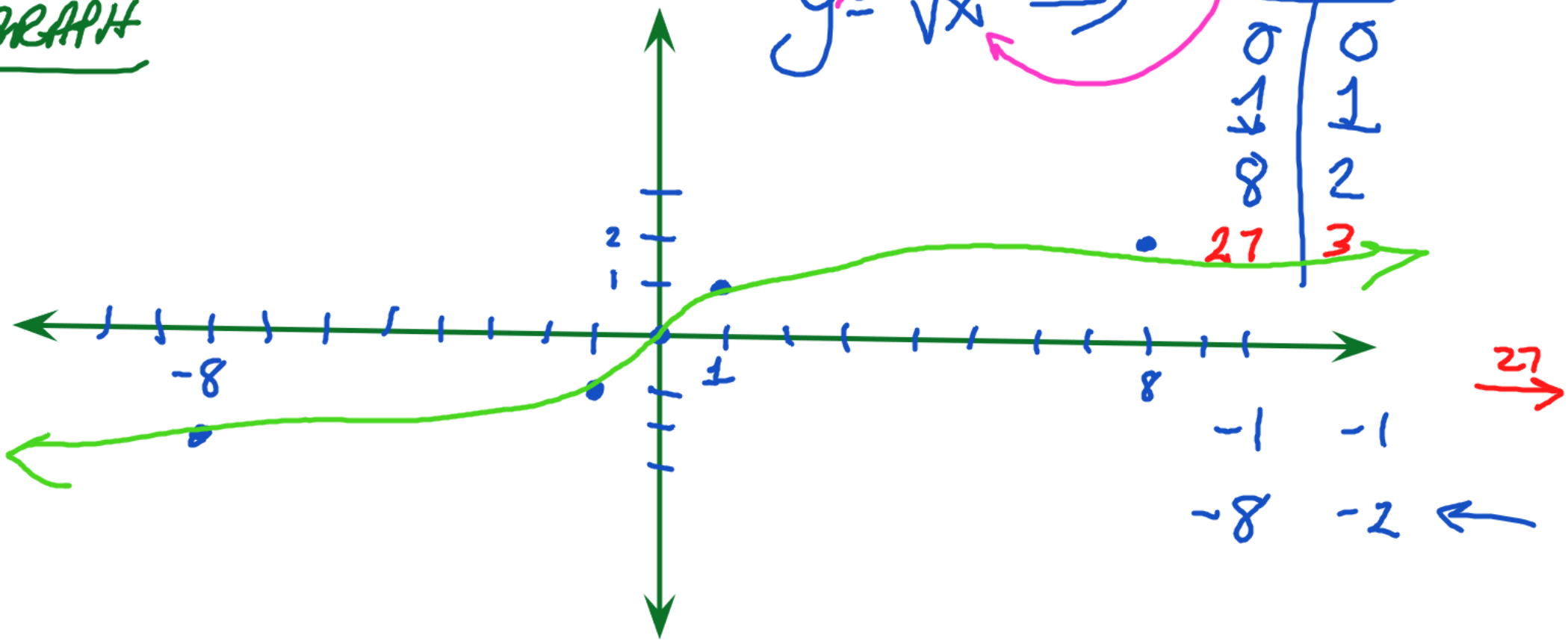
$\sqrt[3]{1} = 1$ $\sqrt[3]{8} = 2$ $\sqrt[3]{27} = 3$ $\sqrt[3]{125} = 5$

$\sqrt[3]{-8} = -2$ $(-2)(-2)(-2) = -8$

GRAPH

$y = \sqrt[3]{x} \Rightarrow$

x	y
0	0
1	1
8	2
27	3
-1	-1
-8	-2



$y = \sqrt[3]{x} + c$

shifts the graph up (+) or down (−)

c units.

(0,0) (1,1) (−1,−1)

$$y = \sqrt[3]{x - b}$$

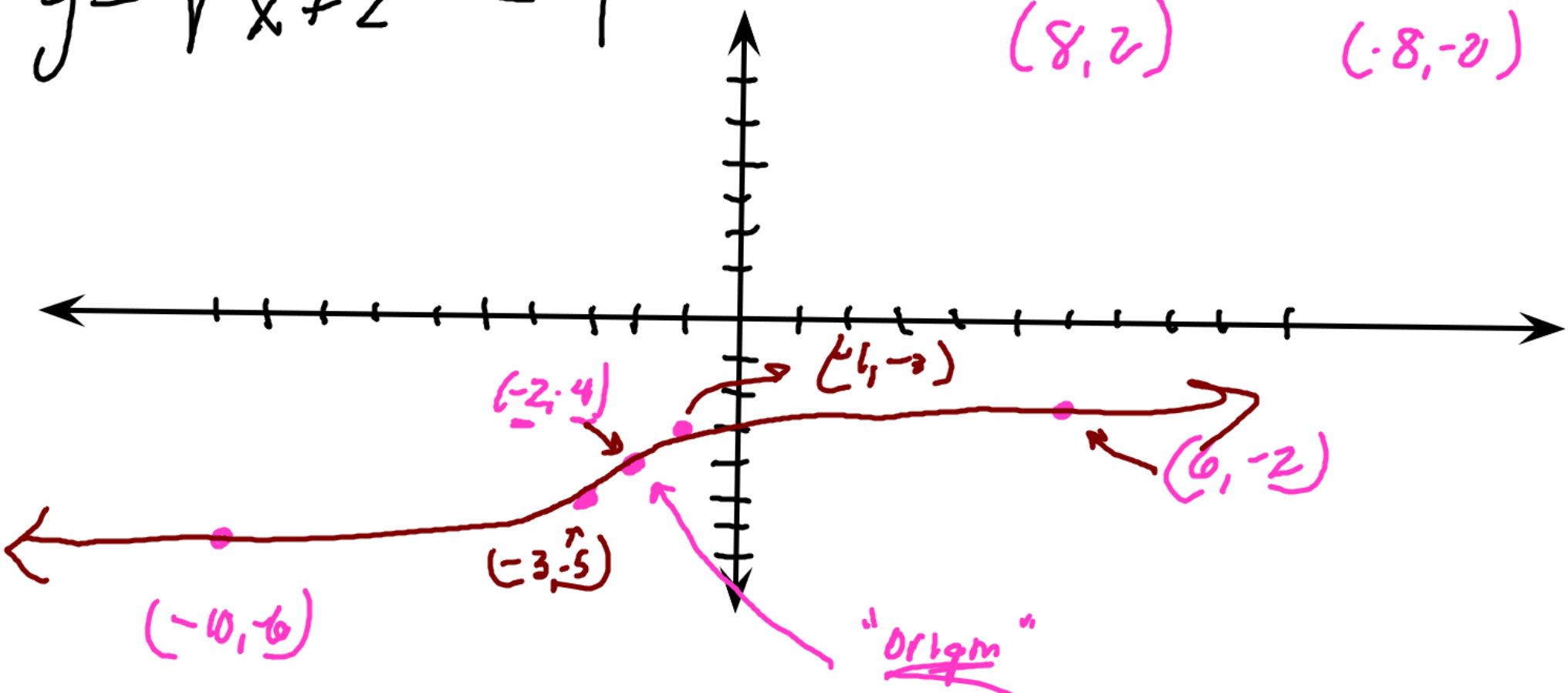
Shift LEFT (+), RIGHT (−)

b units.

$y = \sqrt[3]{x+2} - 4$

$\sqrt[3]{8} = 2$ $(8, 2)$

$\sqrt[3]{-8} = -2$ $(-8, -2)$



Option 1: p 423 16-25

Option 2: Worksheet A8 1, 2, 4, 6, 11