

$$\log(5-2x)$$

$$\log(-2x+5)$$

$$\log\left(-2\left(x-\frac{5}{2}\right)\right)$$

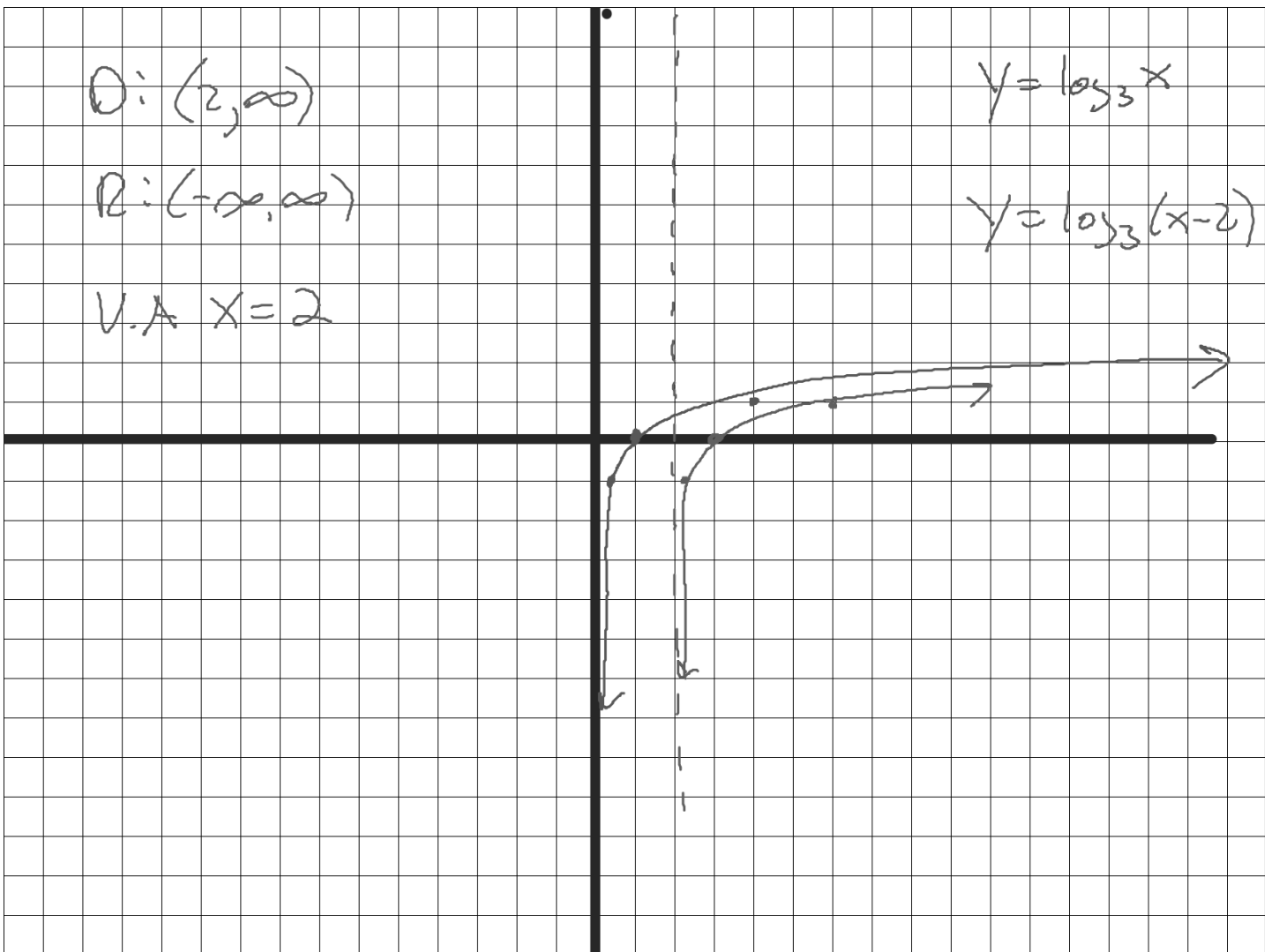
$$D: (2, \infty)$$

$$R: (-\infty, \infty)$$

$$\text{V.A. } x=2$$

$$y = \log_3 x$$

$$y = \log_3 (x-2)$$



$(1, 0)$

$(3, 1)$

$(\frac{1}{3}, -1)$

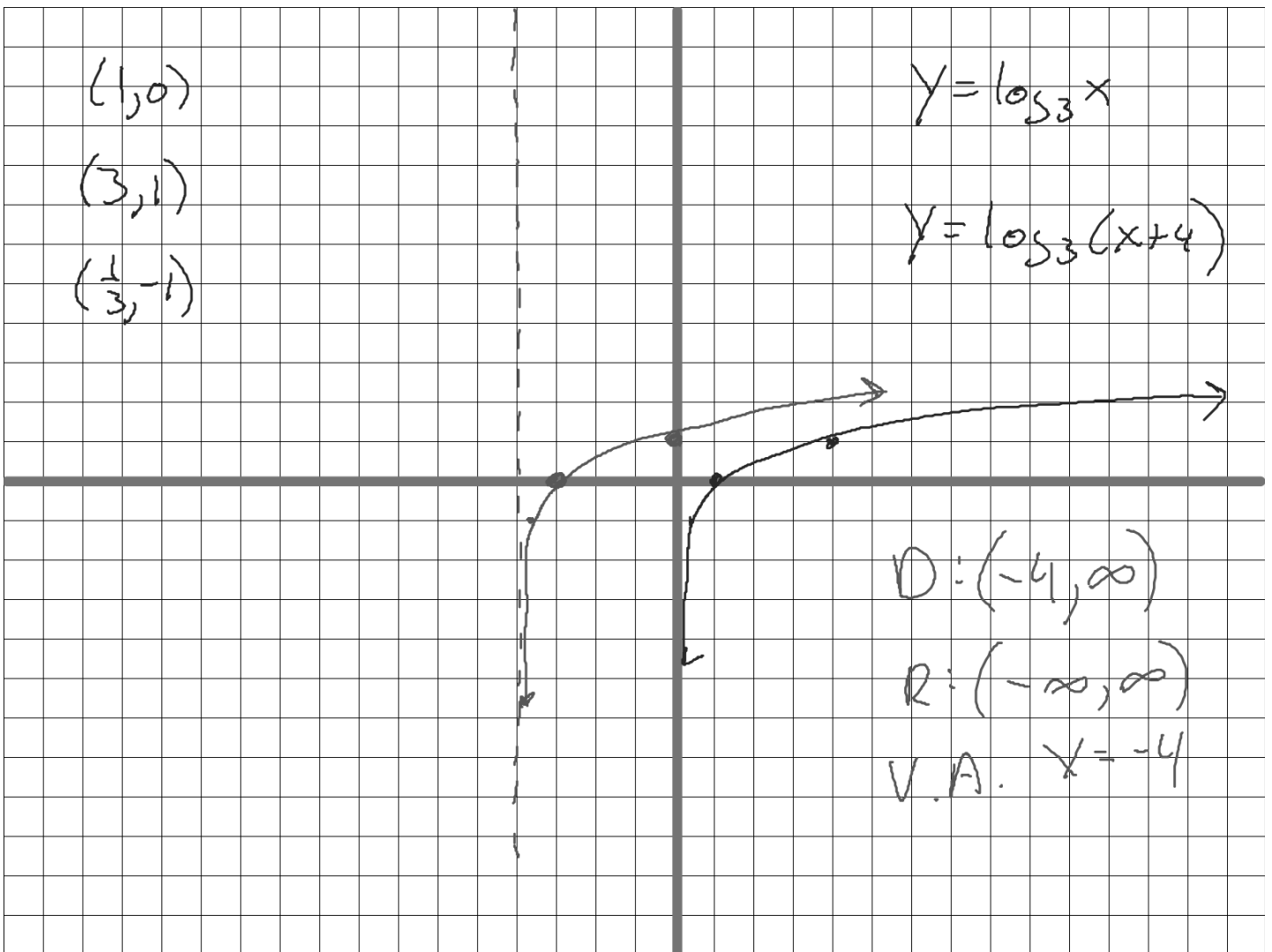
$$y = \log_3 x$$

$$y = \log_3(x+4)$$

$$D: (-4, \infty)$$

$$R: (-\infty, \infty)$$

$$V.A. \quad x = -4$$



$$y = \log_3 x$$

$$3^x = 9$$

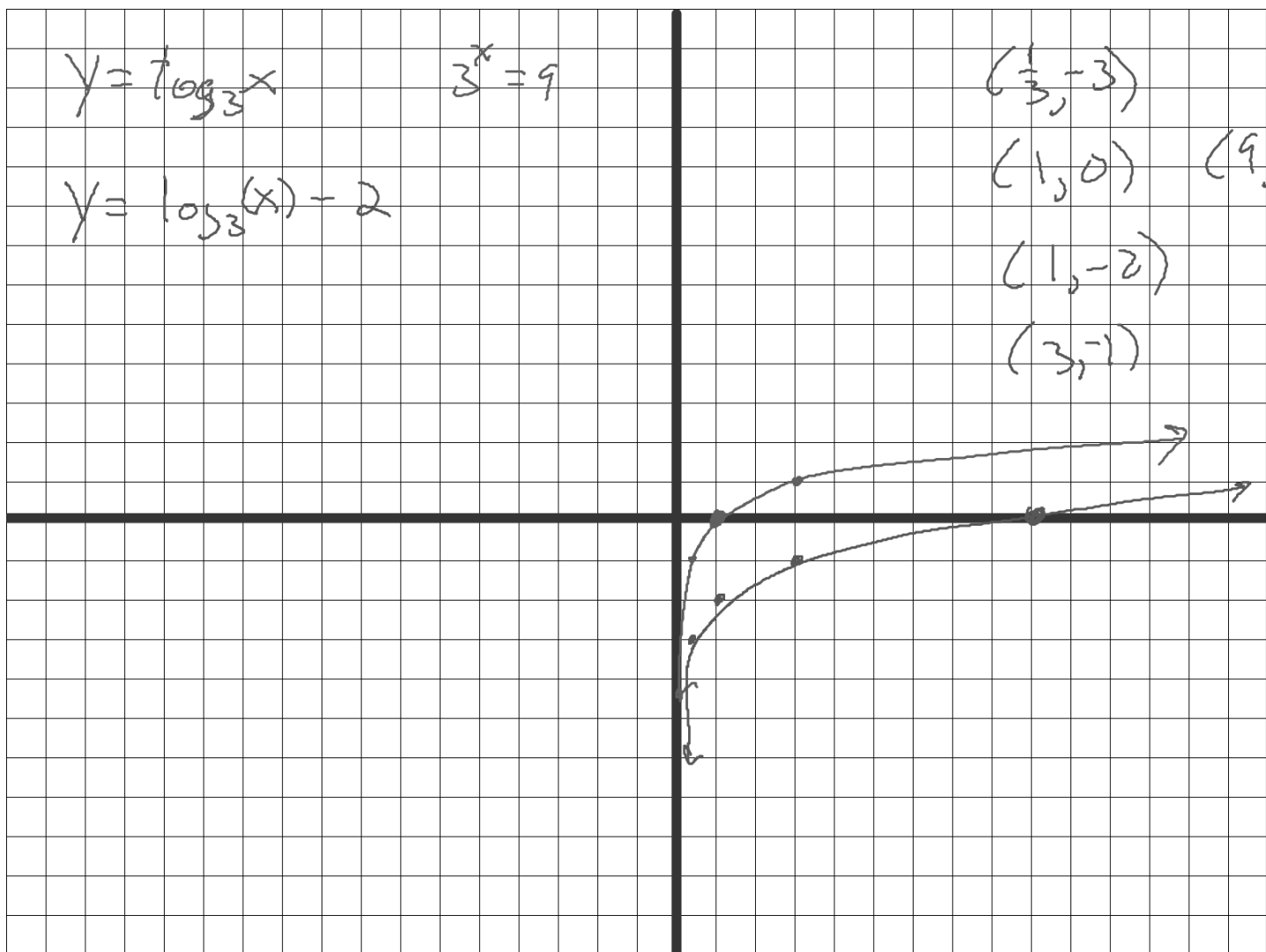
$$y = \log_3(x) - 2$$

$$\left(\frac{1}{3}, -3\right)$$

$$(1, 0) \quad (9, 2)$$

$$(1, -2)$$

$$(3, -1)$$



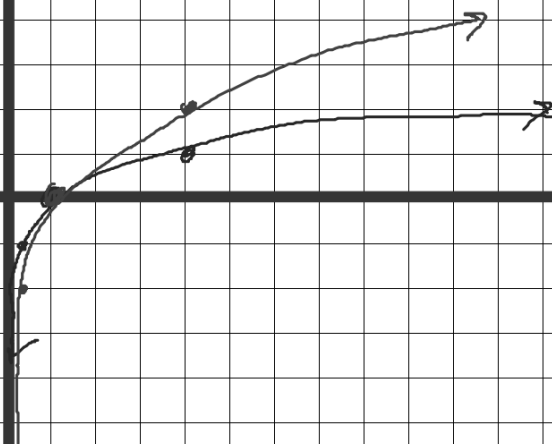
$$y = \log_4 x \quad \begin{matrix} (1,0) & (4,1) \\ (\frac{1}{4}, -1) \end{matrix}$$

$$y = 2 \log_4 x \quad \begin{matrix} (1,0) & (4,2) \\ (\frac{1}{4}, -2) \end{matrix}$$

$$D: (0, \infty)$$

$$R: (-\infty, \infty)$$

$$\text{V.A. } x=0$$



$$y = 3 \log(x-2) + 1$$

$$y+3$$

$$x+2$$

$$y+1$$

$$(1,0)$$

$$(3,0)$$

$$(3,1)$$

$$\left(\frac{1}{10}, -3\right)$$

$$\left(\frac{21}{10}, -3\right)$$

$$\left(\frac{21}{10}, -2\right)$$

$$(10, 3)$$

$$(12, 3)$$

$$(12, 4)$$

$$D (2, \infty)$$

$$R (-\infty, \infty)$$

$$V.A. x=2$$

$$y = \log x$$

$$(1,0)$$

$$\left(\frac{1}{10}, -1\right)$$

$$(10,1)$$

