

①

لوگاریتم عادی

$$\log_{10}$$

$$1 = \text{Zero}$$

$$\log_5$$

$$1 = 0$$

لوگاریتم
طبیعی

$$\ln_e$$

$$1 = 0$$

$$\log_b 1 = 0$$

$$\textcircled{2} \quad \log_b b = 1$$

$$\log_5 5 = 1$$

$$\log_7 7 = 1$$

$$\log_{10} 10 = 1$$

$$\log_e e = 1$$

③ $\log_b x = x$

$\log_7 7^5 = 5$

$\log_3 3^8 = 8$

④

$$\log_x x = x$$

$$\log_5 8$$

$$10$$

$$\log_5 7$$

$$5$$

$$= 7$$

$$\log 8$$

$$10$$

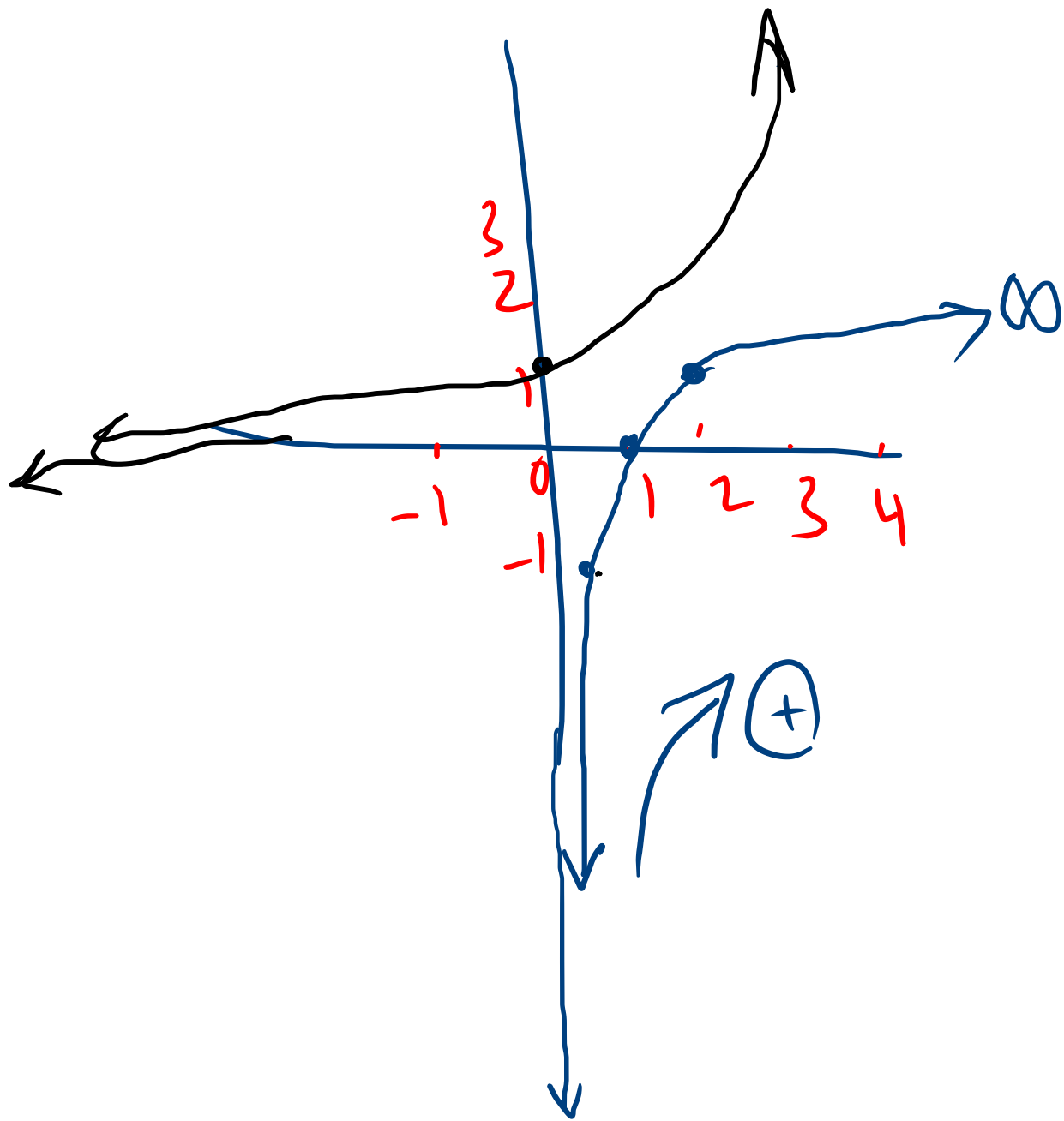
$$= 8$$

$$\text{Log}_{\boxed{b}} \boxed{x} = \text{log}_b x$$

$$\text{Log}_b x = x$$

نکته

$$\text{Log}_{\boxed{5}} \boxed{3} = \boxed{\text{log}_5 3}$$



$$\log_2(x)$$

	x	y
✓	2	1
✓	1	0
✓	$\frac{1}{2}$	-1
	4	2
	8	3

