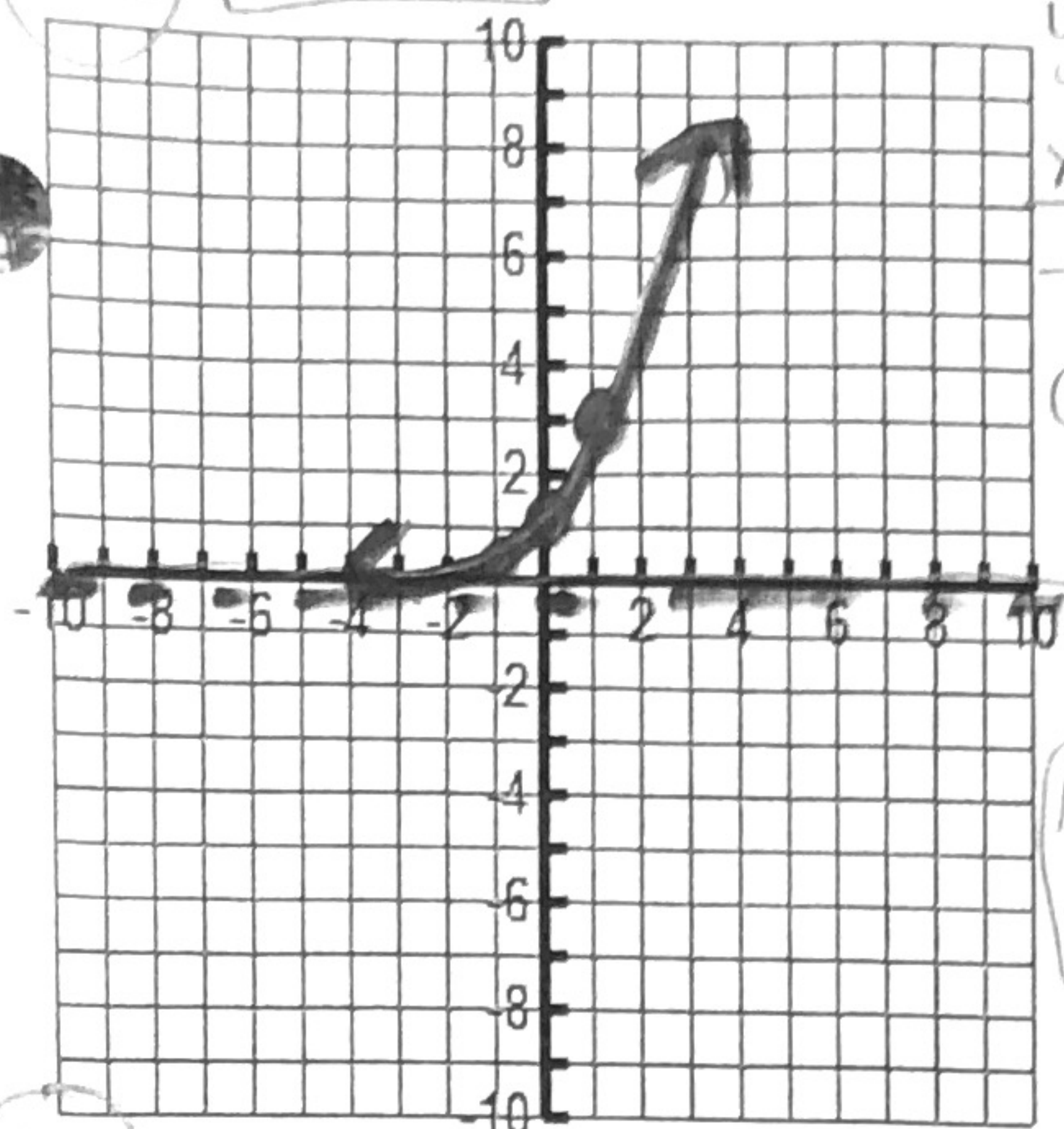


#10

p482

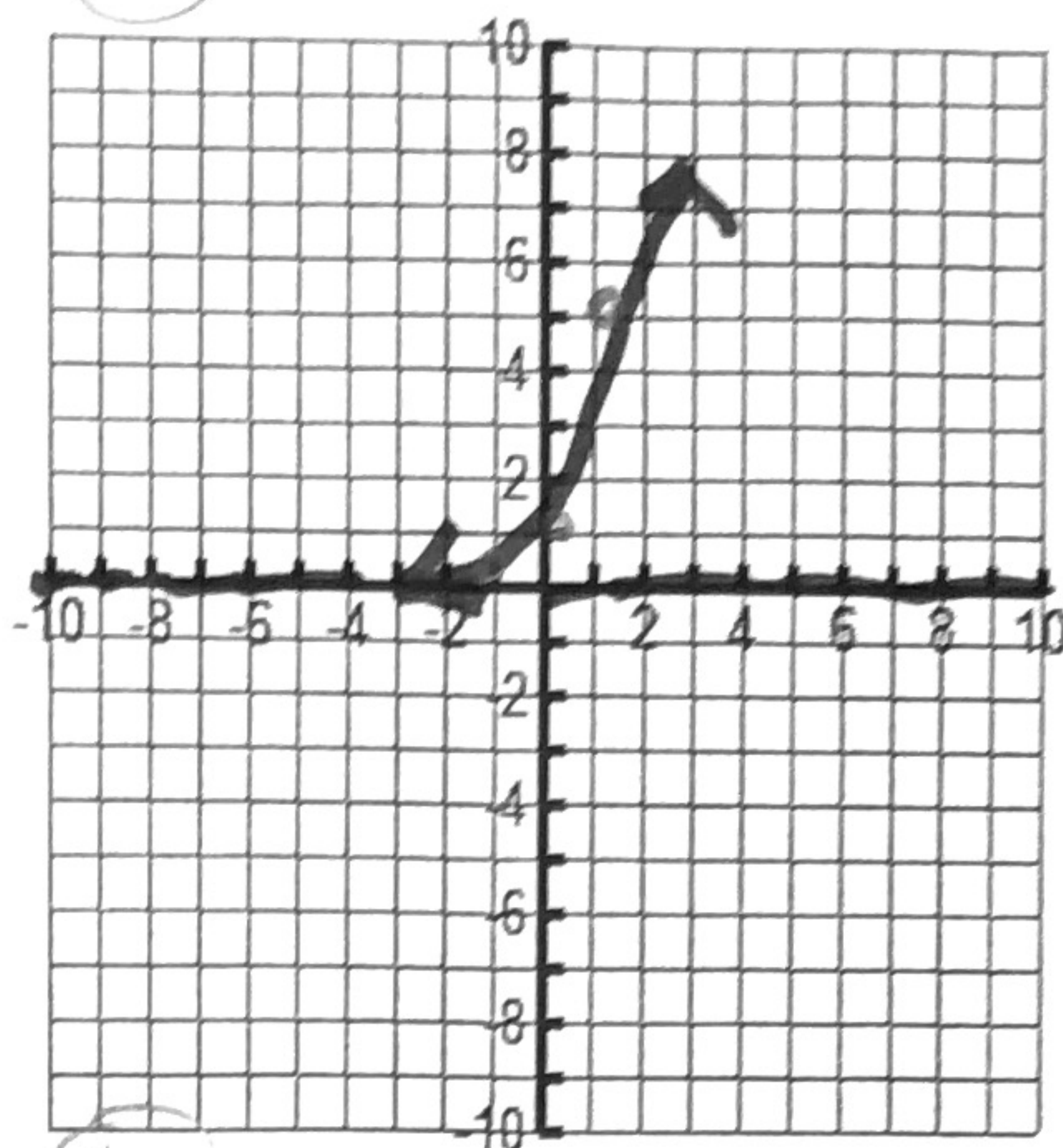


$$y = 3^x$$

x	y
-1	$\frac{1}{3}$
0	1
1	3

Asym
 $y = 0$

#9

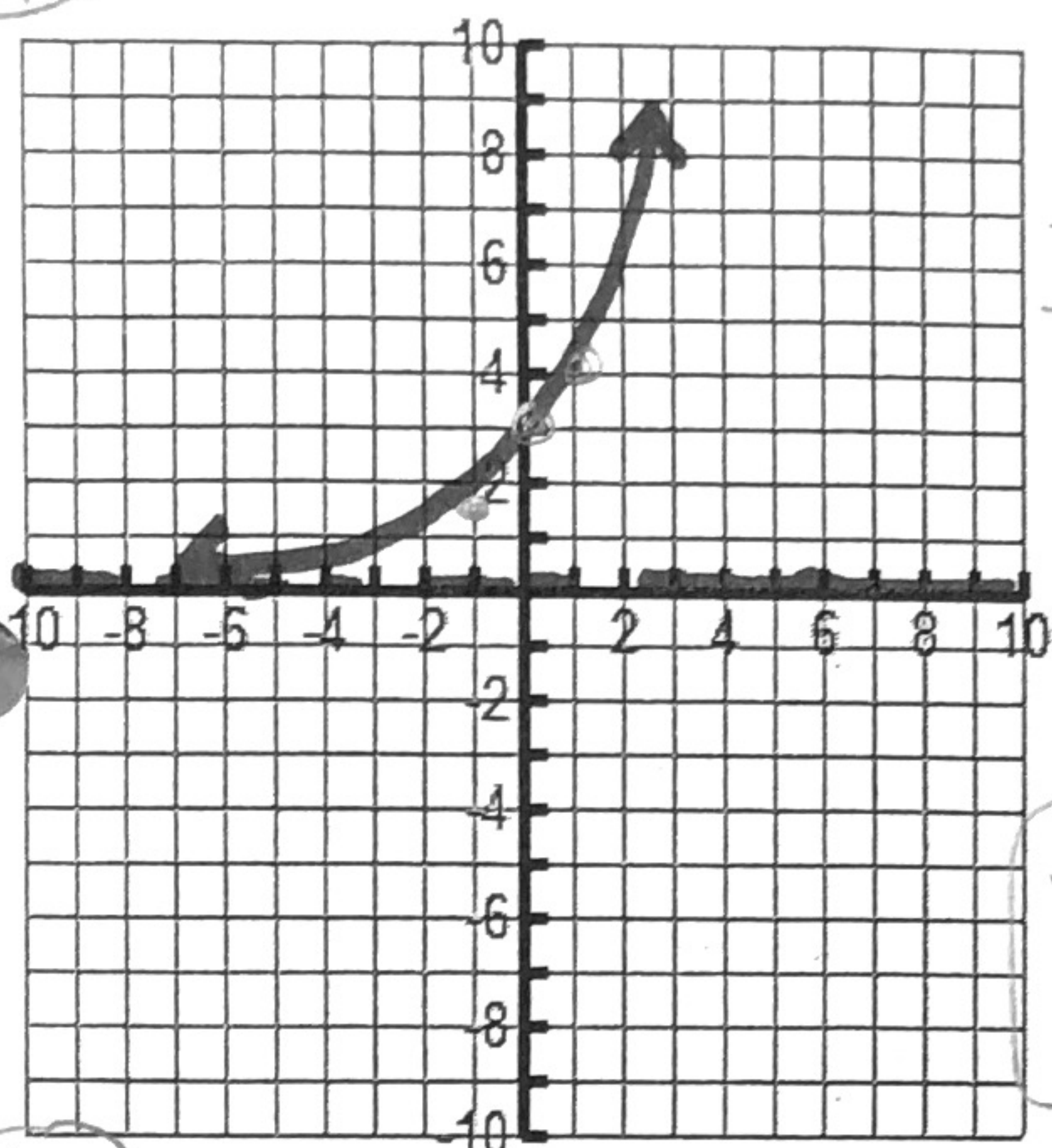


$$y = 5^x$$

x	y
-1	$\frac{1}{5}$
0	1
1	5

Asym
 $y = 0$

#12

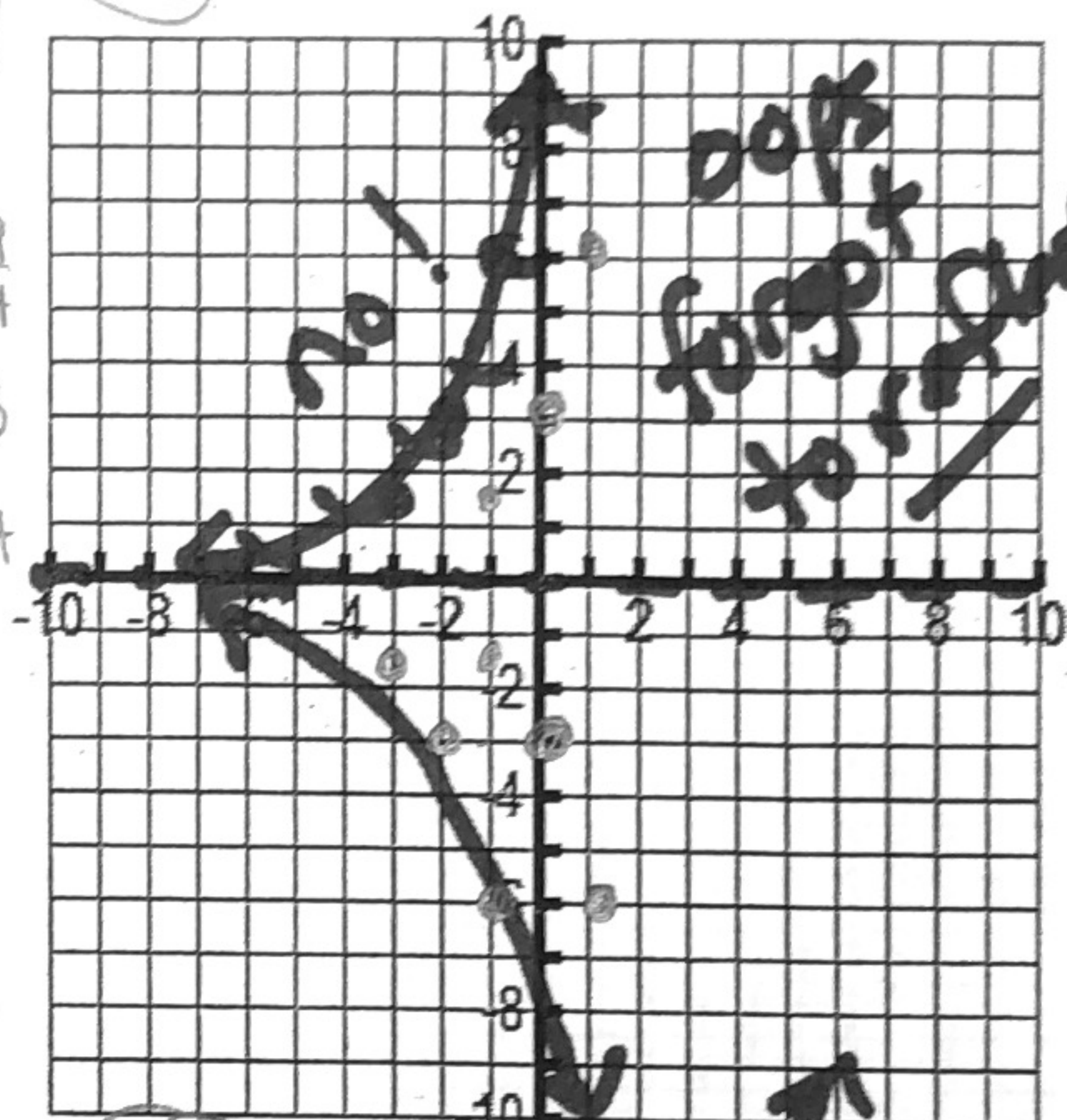


$$y = 3\left(\frac{4}{3}\right)^x$$

x	y
-1	$3\left(\frac{4}{3}\right)^{-1} = \frac{9}{4}$
0	$3\left(\frac{4}{3}\right)^0 = 3$
1	$3\left(\frac{4}{3}\right)^1 = 4$

Asym
 $y = 0$

#15



$$y = -3 \cdot 2^{x+2}$$

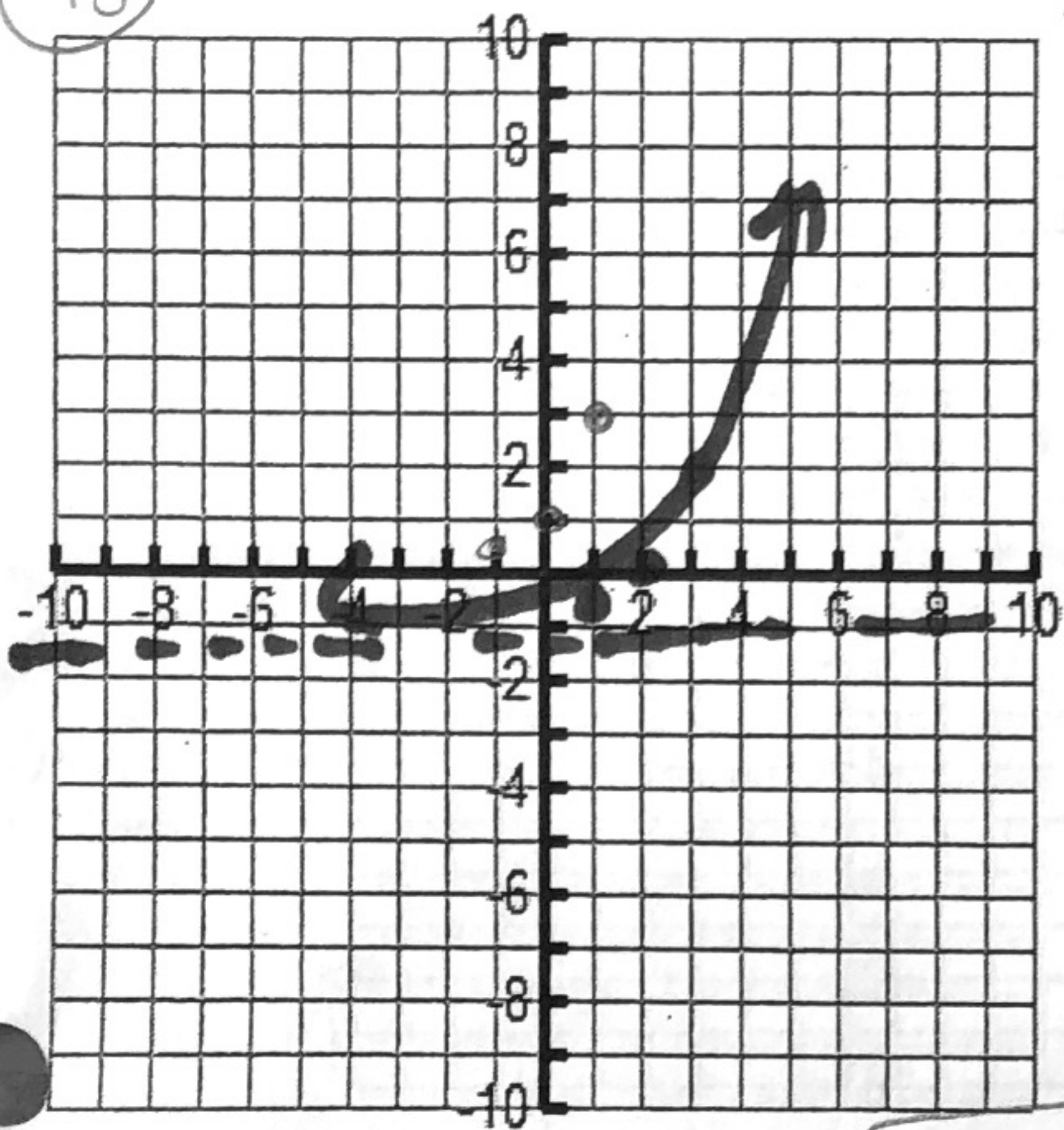
$$y = -3 \cdot 2^x$$

x	y
-1	$-3 \cdot 2^{-1} = -3 \cdot \frac{1}{2} = -\frac{3}{2}$
0	$-3 \cdot 2^0 = -3$
1	$-3 \cdot 2^1 = -6$

Shift
 $\leftarrow 2$

Asym
 $y = 0$

#18



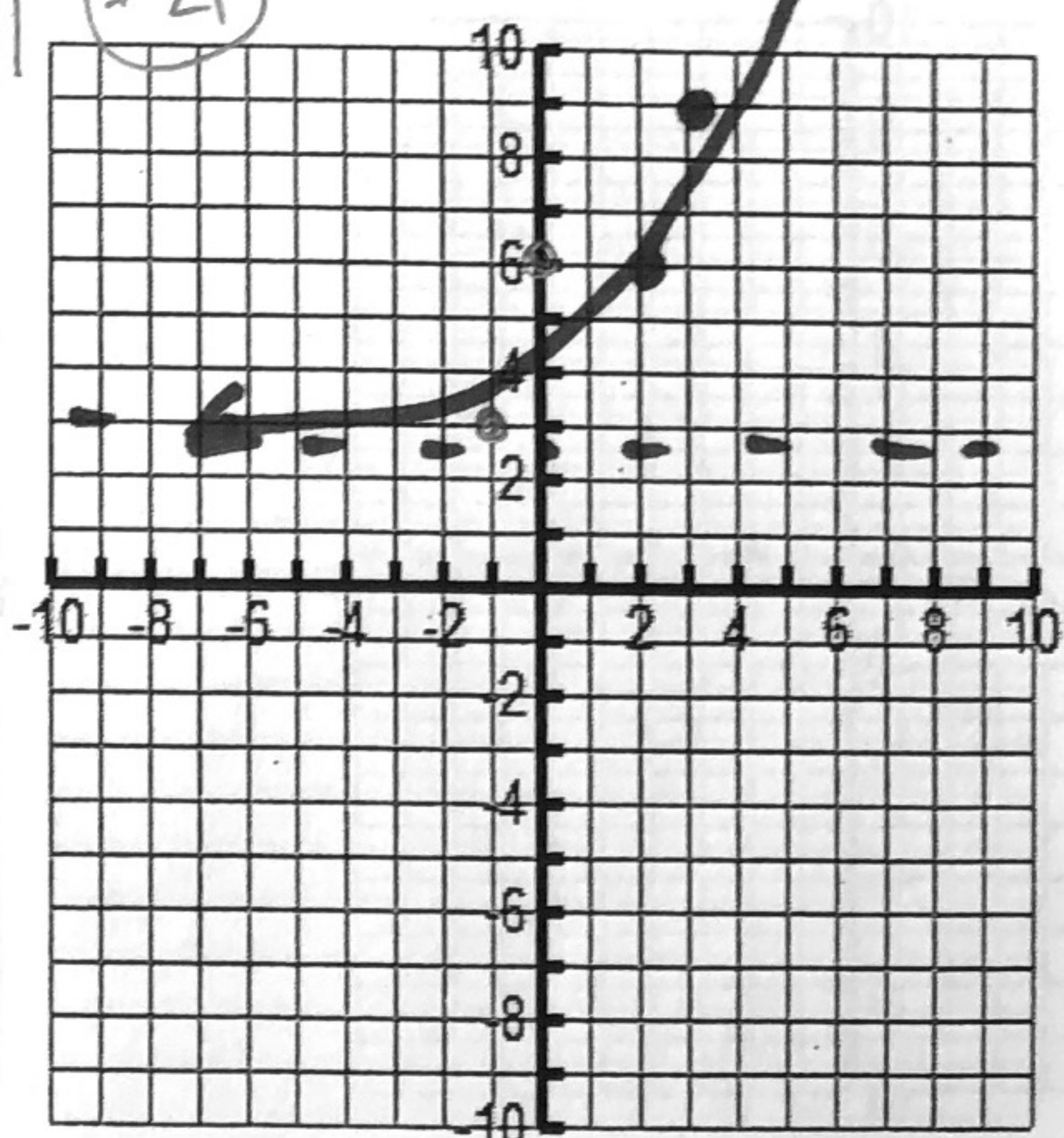
$$y = 3^{x-2} - 1$$

x	y
-1	$\frac{1}{3}$
0	1
1	3

Shift
 $\rightarrow 2$
 $\downarrow 1$

Asym
 $y = -1$

#21



$$y = 6 \cdot 2^{x-3} + 3$$

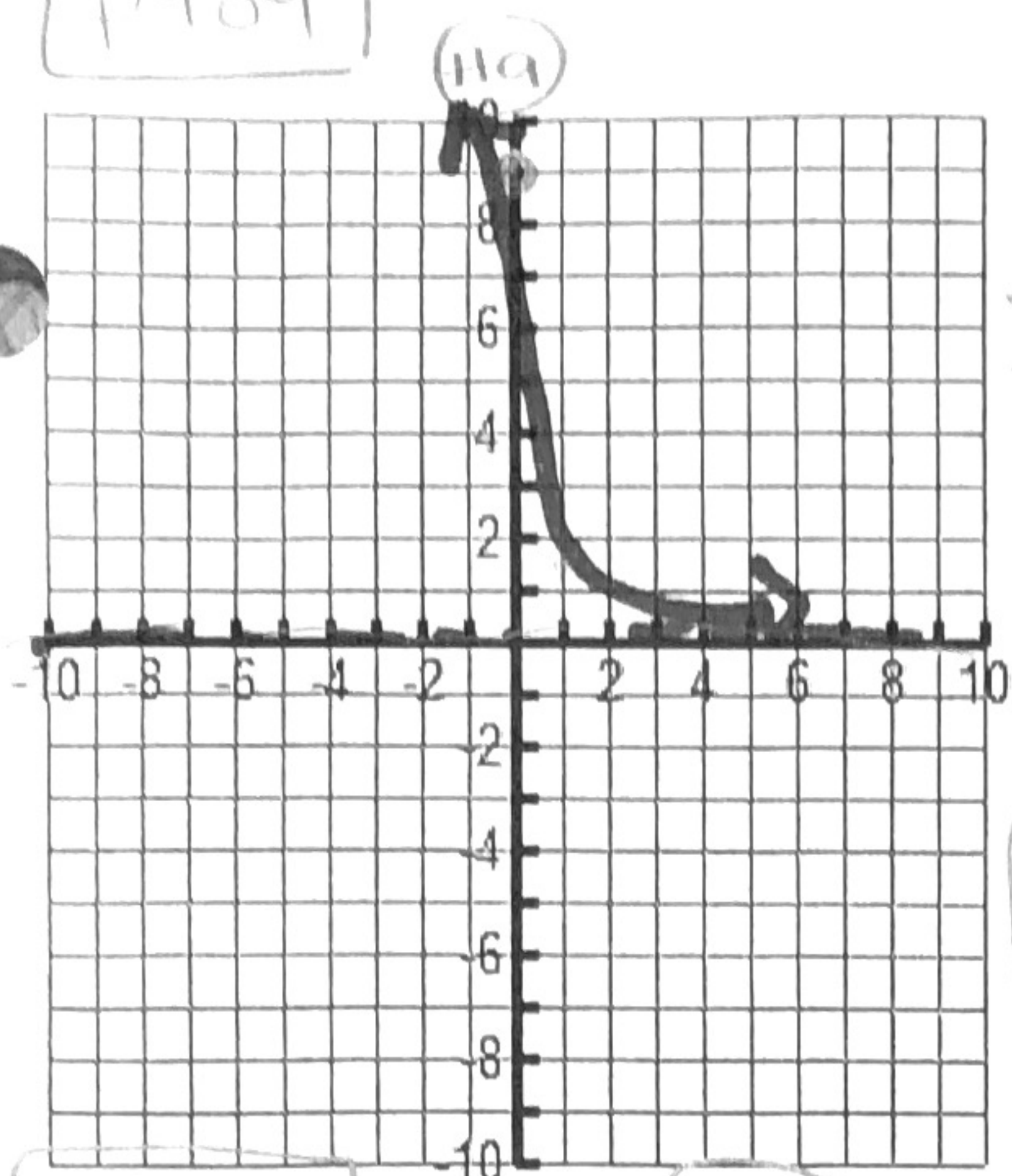
$$y = 6 \cdot 2^x$$

x	y
-1	$6 \cdot 2^{-1} = 3$
0	$6 \cdot 2^0 = 6$
1	$6 \cdot 2^1 = 12$

Shift
 $\rightarrow 3$
 $\uparrow 3$

Asym
 $y = 3$

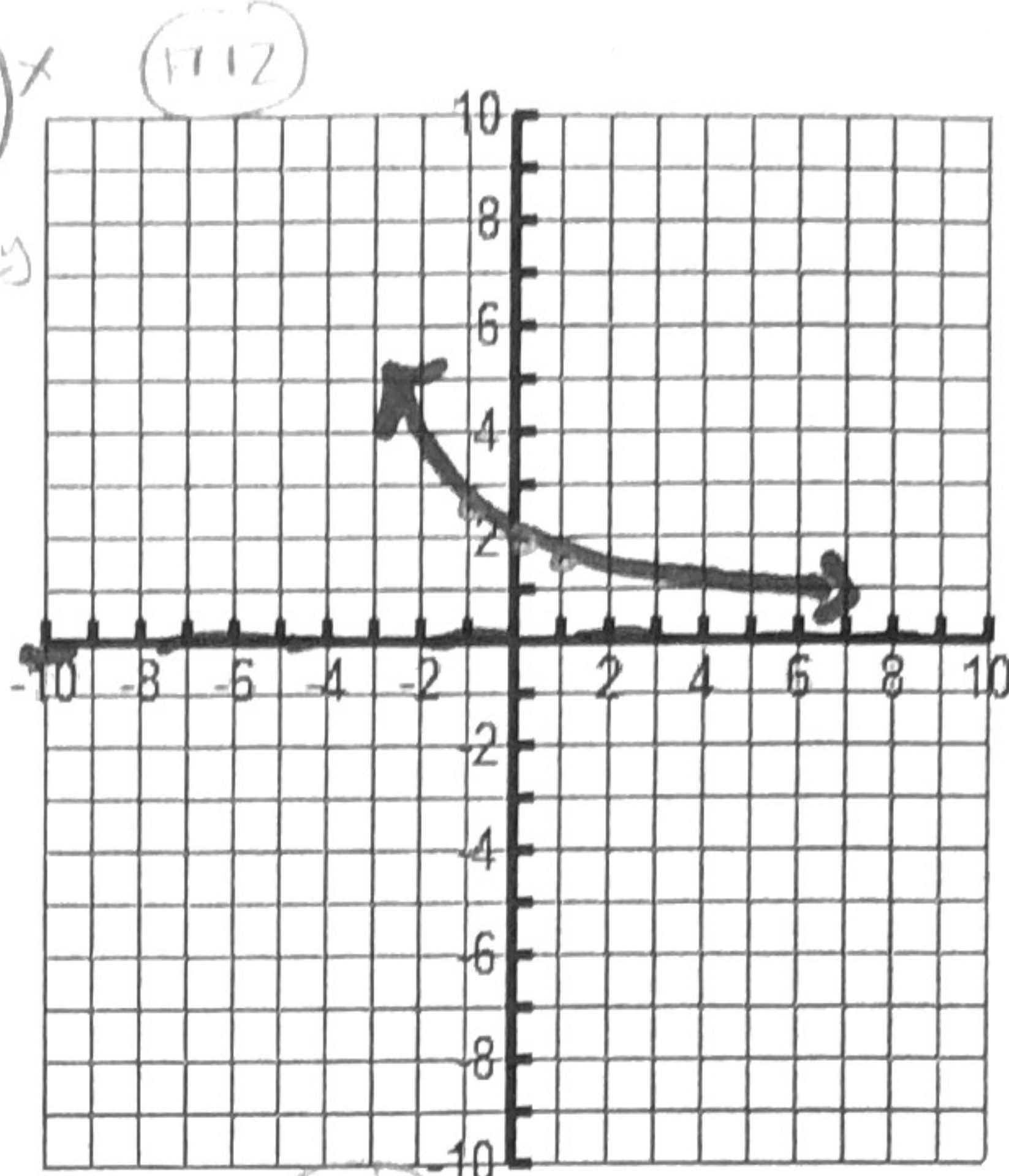
#1 decay (p489) #2 growth #3 growth #4 decay



$$y = 9 \cdot \left(\frac{1}{5}\right)^x$$

x	y
-1	45
0	9
1	$\frac{9}{5}$

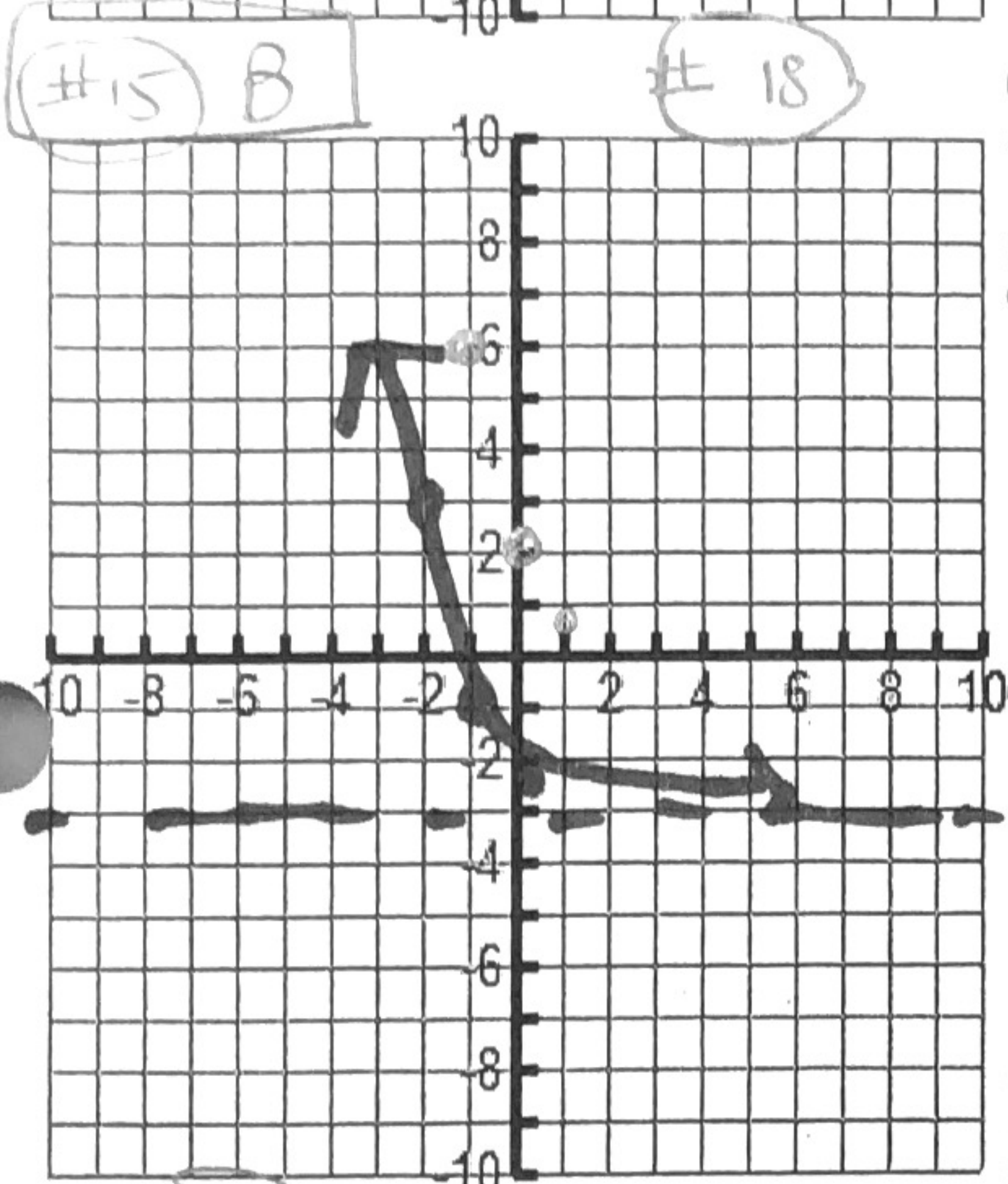
Asym
 $y=0$



$$y = 2 \cdot \left(\frac{3}{4}\right)^x$$

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

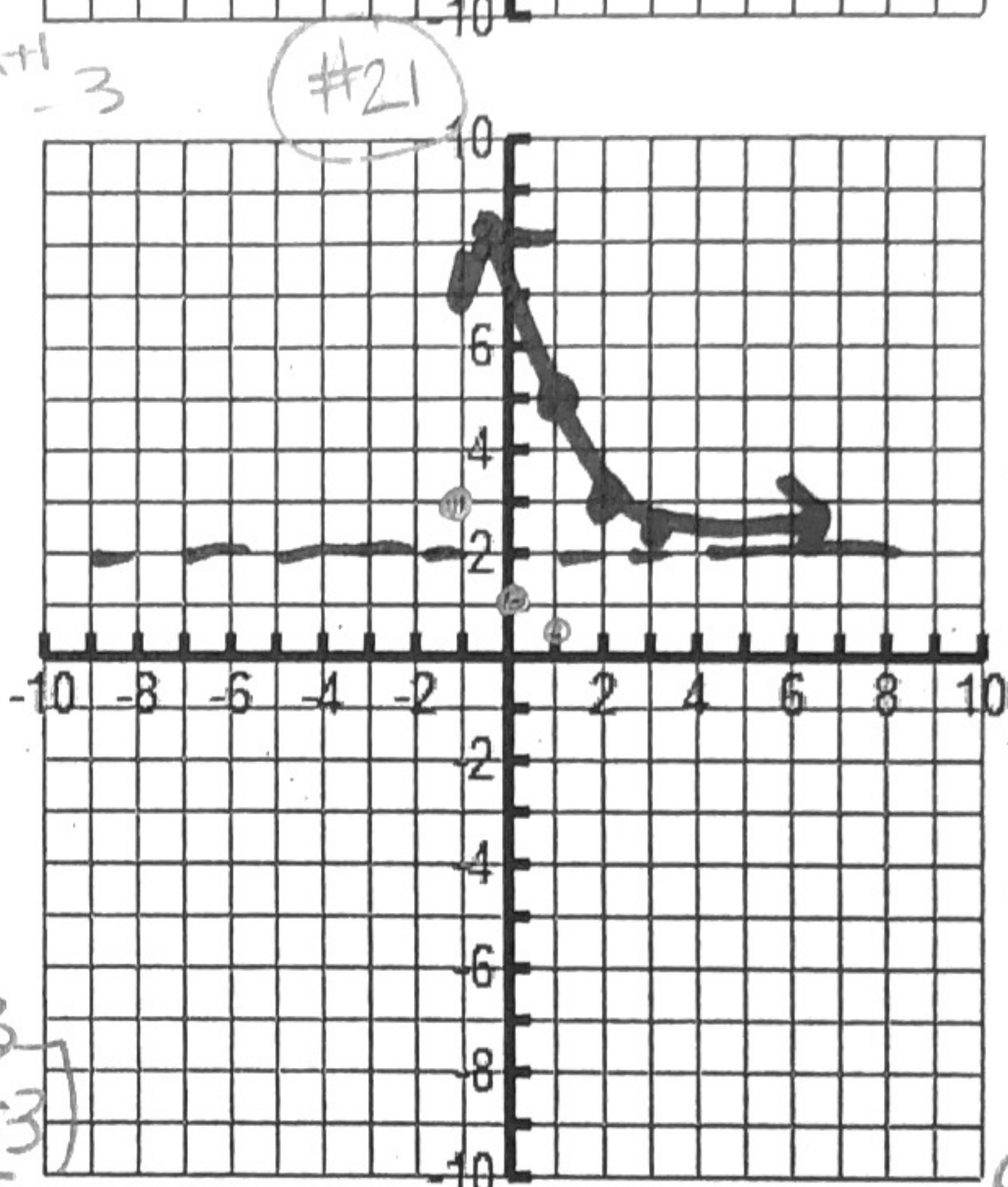
Asym
 $y=0$



$$y = 2 \cdot \left(\frac{1}{3}\right)^{x+1} - 3$$

x	y
-1	6
0	2
1	$\frac{2}{3}$

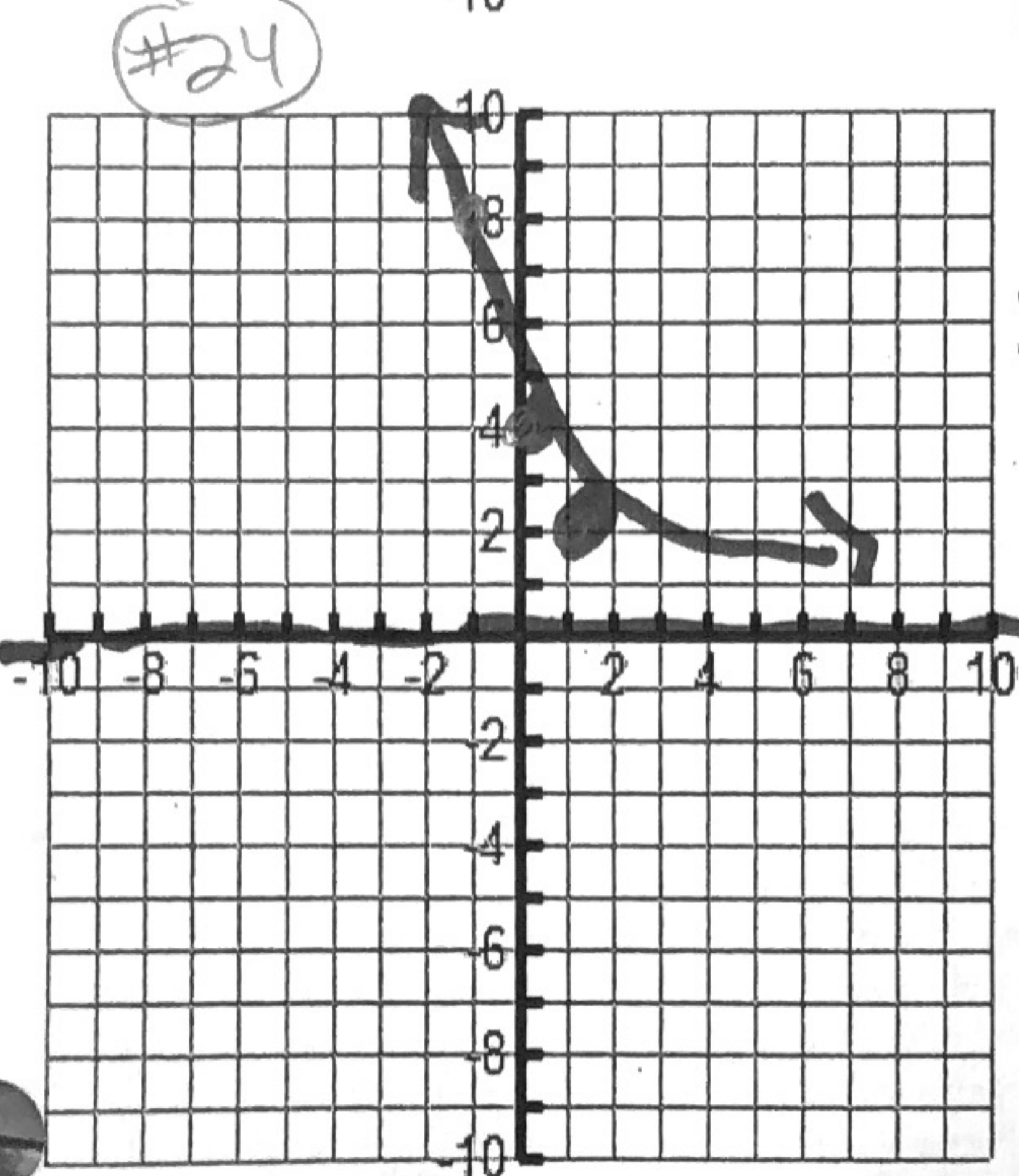
Shift
 $\leftarrow 1 \downarrow 3$
Asym $y=-3$



$$y = \left(\frac{1}{3}\right)^{x-2} + 2$$

x	y
-1	3
0	1
1	$\frac{1}{3}$

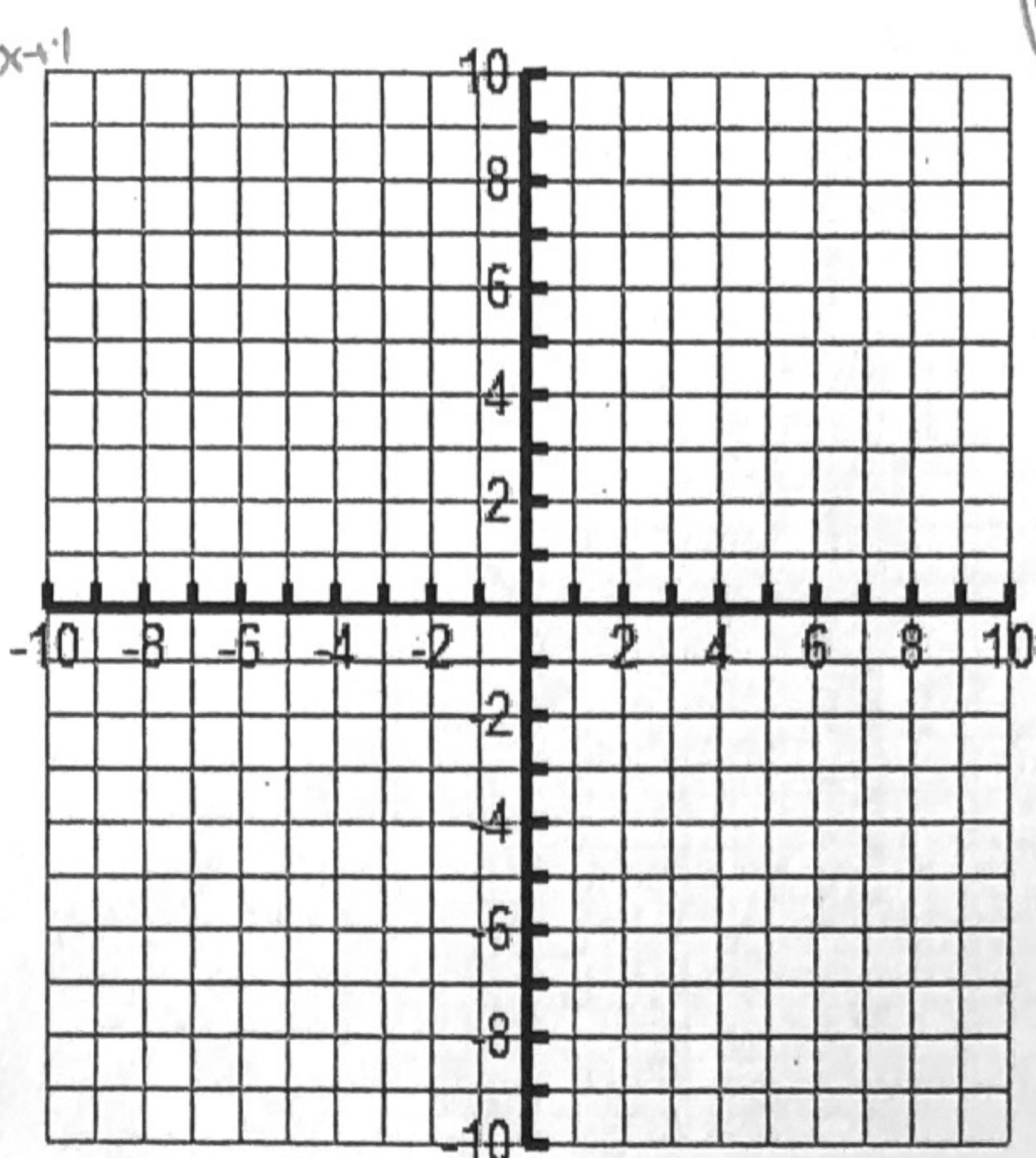
Shift $\rightarrow 2 \uparrow 2$
Asym $y=2$



$$y = 4 \cdot \left(\frac{1}{2}\right)^{x-1}$$

x	y
-1	8
0	4
1	2

Shift
 $\leftarrow 1$



#25 $y = 3 \cdot (.4)^{x-2} - 1$

(a) more steep (b) more decay/flatter (c) $\rightarrow 3$ more (d) up 4 $\uparrow$