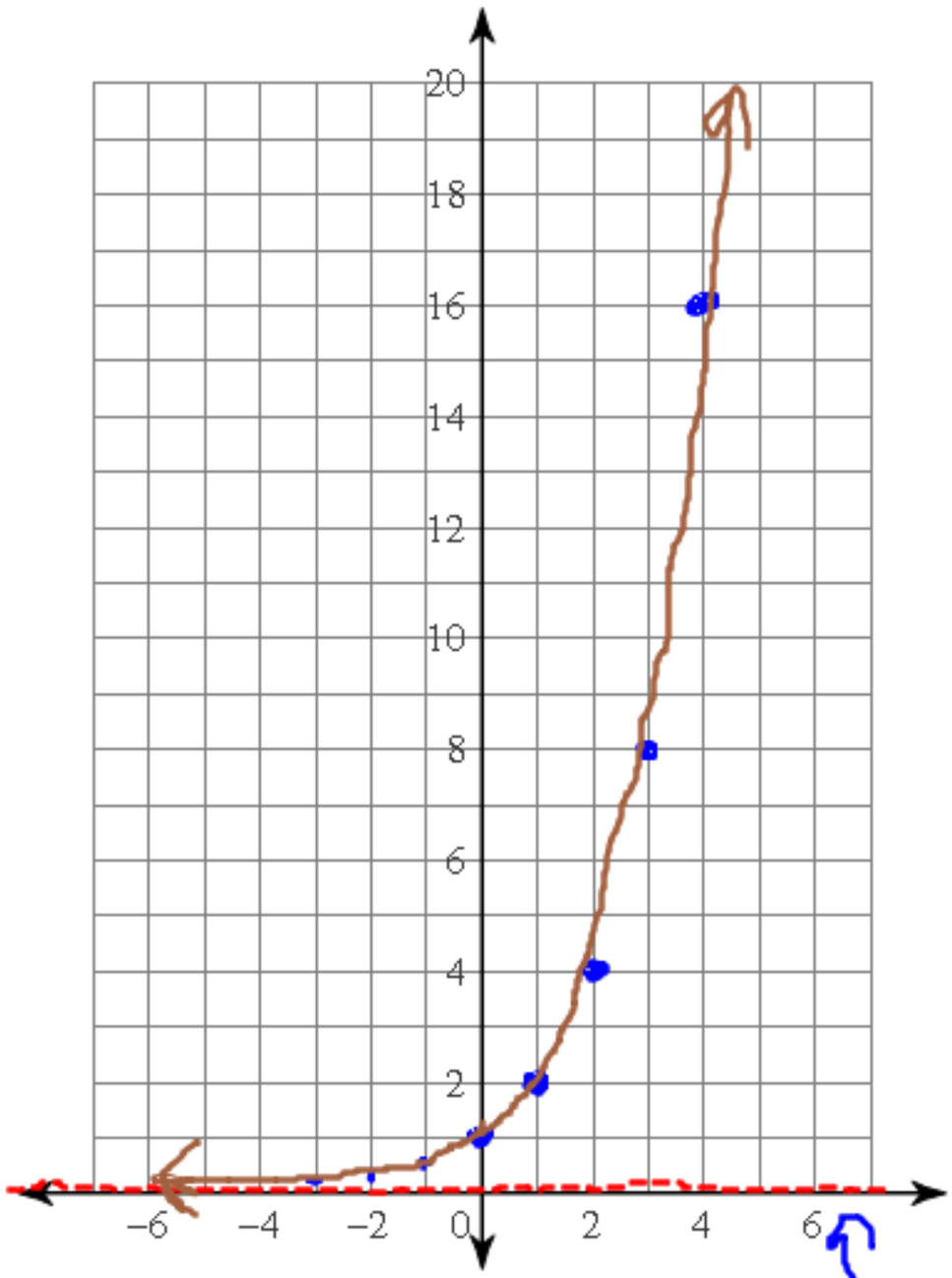
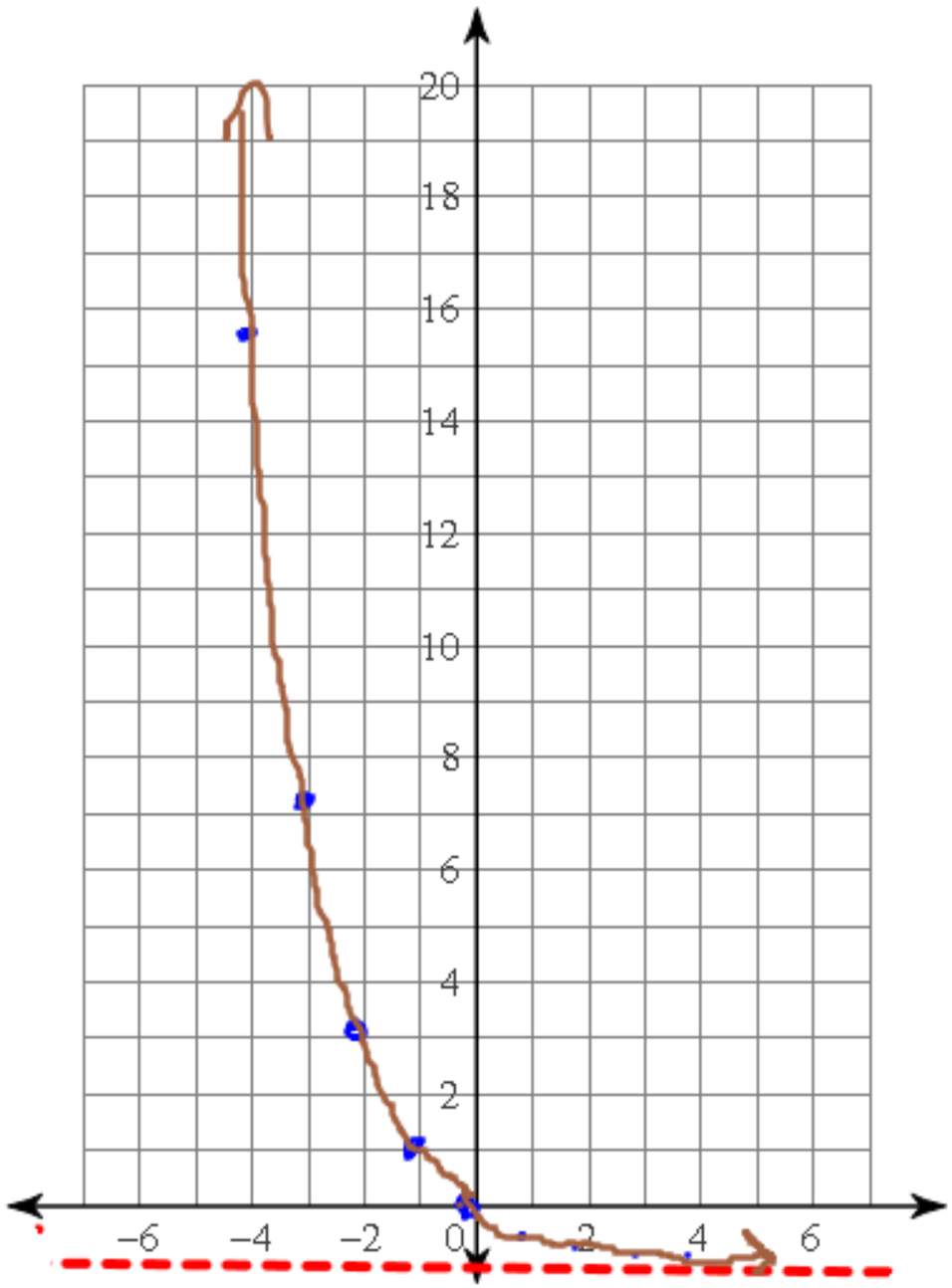
1) $f(x) = 2^x$



x	f(x)
−3	1/8
−2	1/4
−1	1/2
0	1
1	2
2	4
3	8

Asymptote.

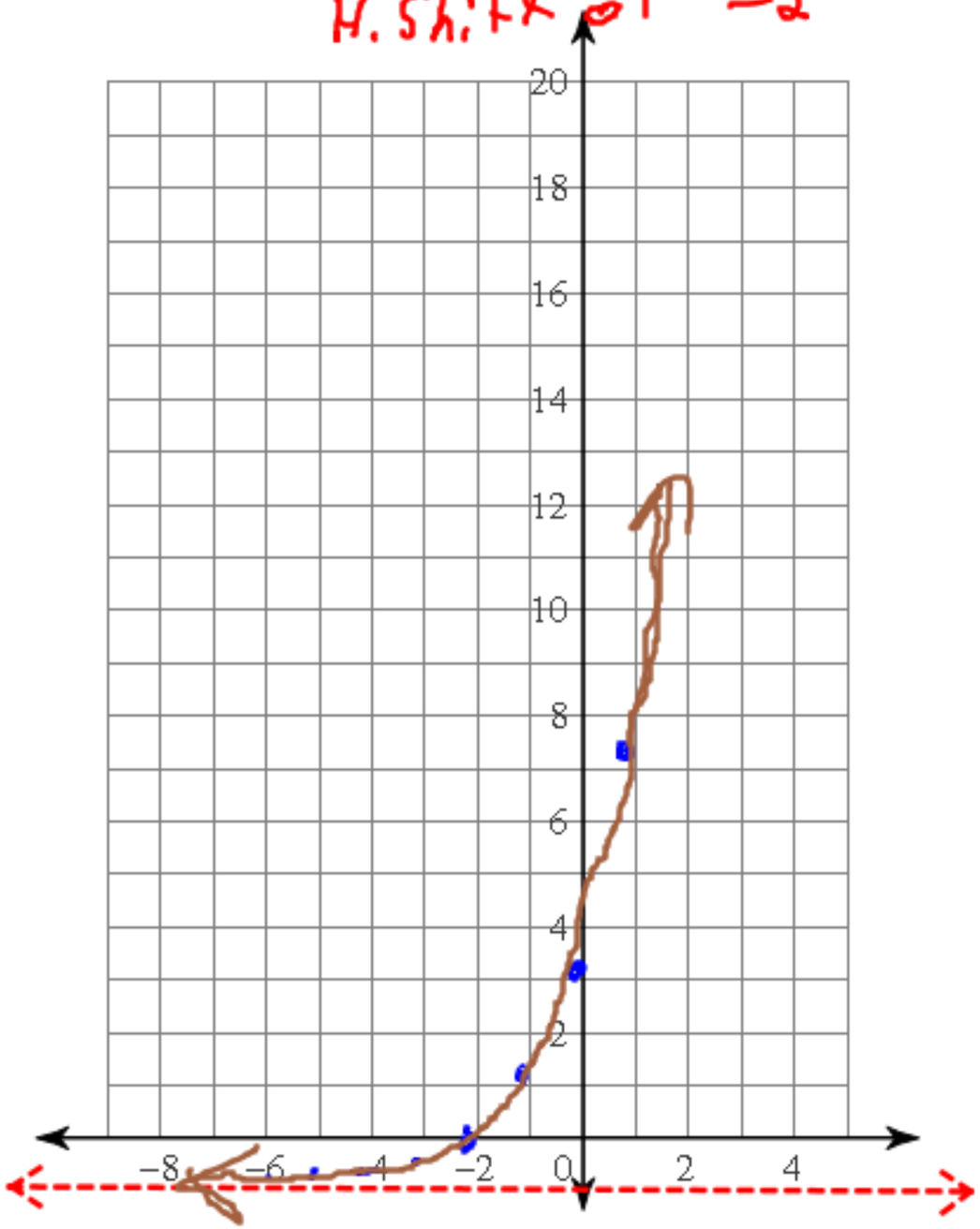
2) $f(x) = \left(\frac{1}{2}\right)^x$



x	$f(x)$
−3	8
−2	4
−1	2
0	1
1	½
2	¼
3	⅛

3) $f(x) = 2^{x+2}$

H. Shift of f −2

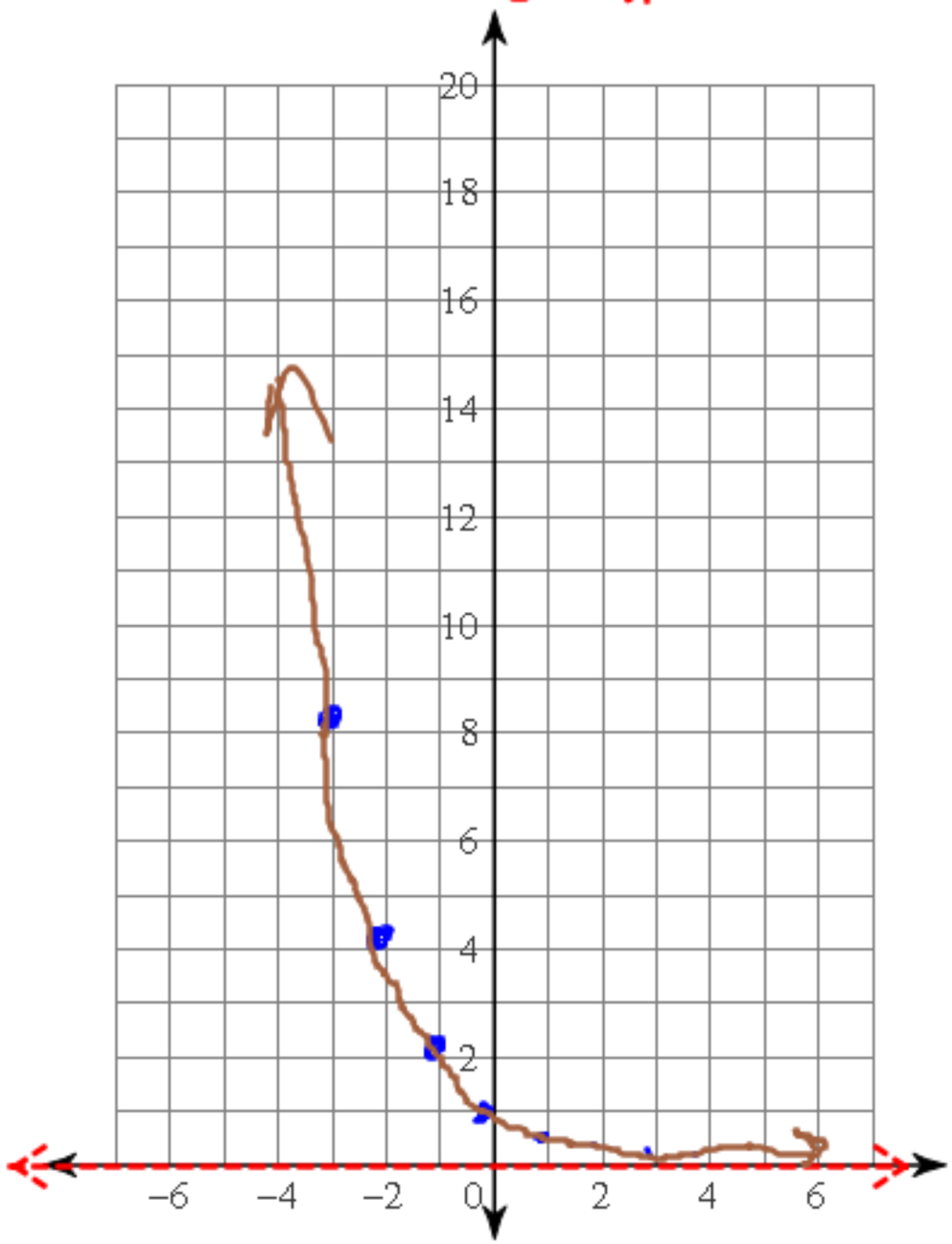


x	f(x)
−3	1/8
−2	1/4
−1	1/2
0	1
1	2
2	4
3	8

x − 2	f(x)
−5	1/8
−4	1/4
−3	1/2
−2	1
−1	2
0	4
1	8

4) $f(x) = \left(\frac{1}{2}\right)^x + 1$

V. shift



x	f(x)
−3	8
−2	4
−1	2
0	1
1	½
2	¼
3	⅛

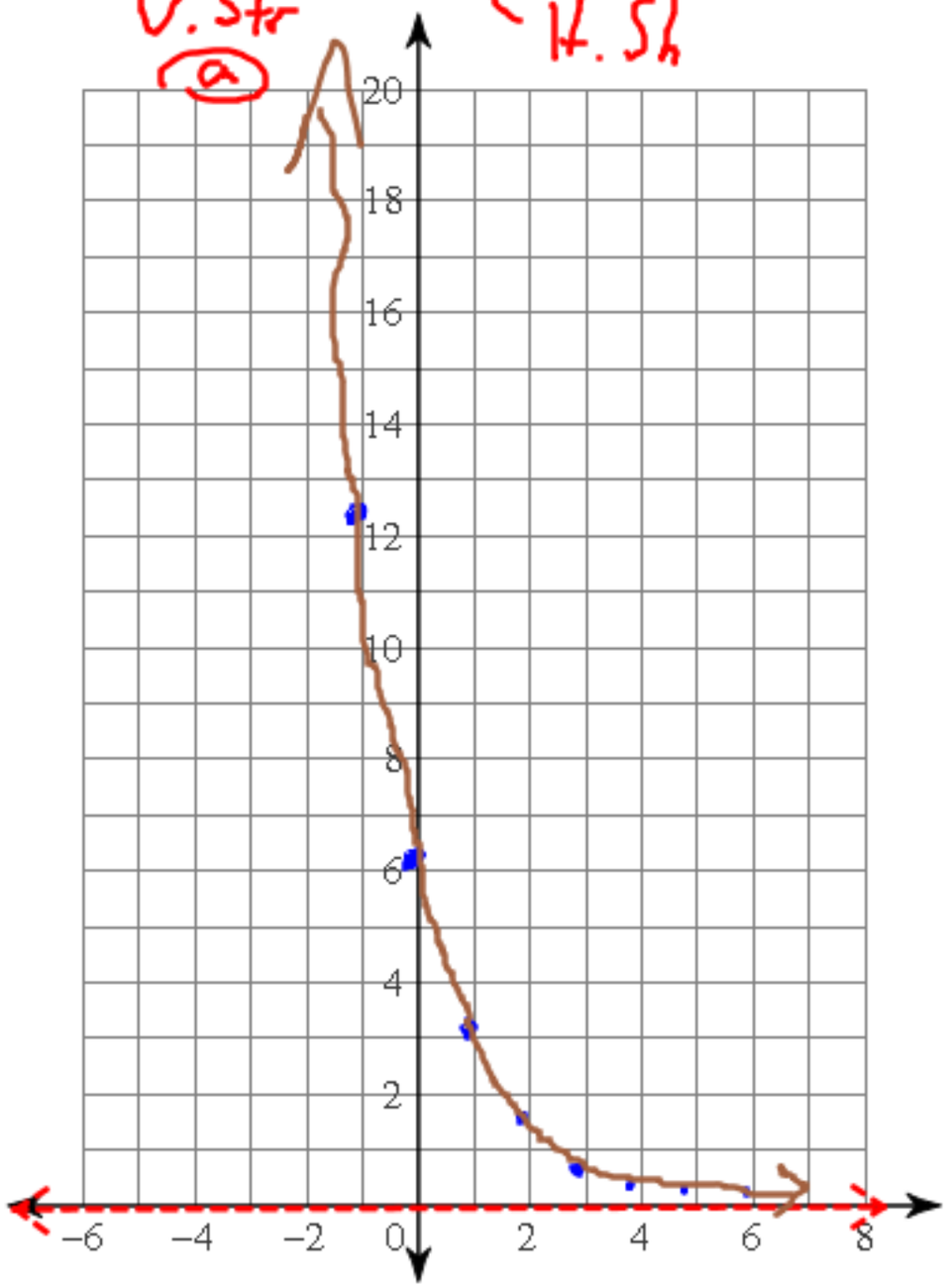
x	f(x) + 1
−3	9
−2	5
−1	3
0	2
1	1.5
2	1.25
3	1.125

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

V. Sh

V. Str

H. Sh

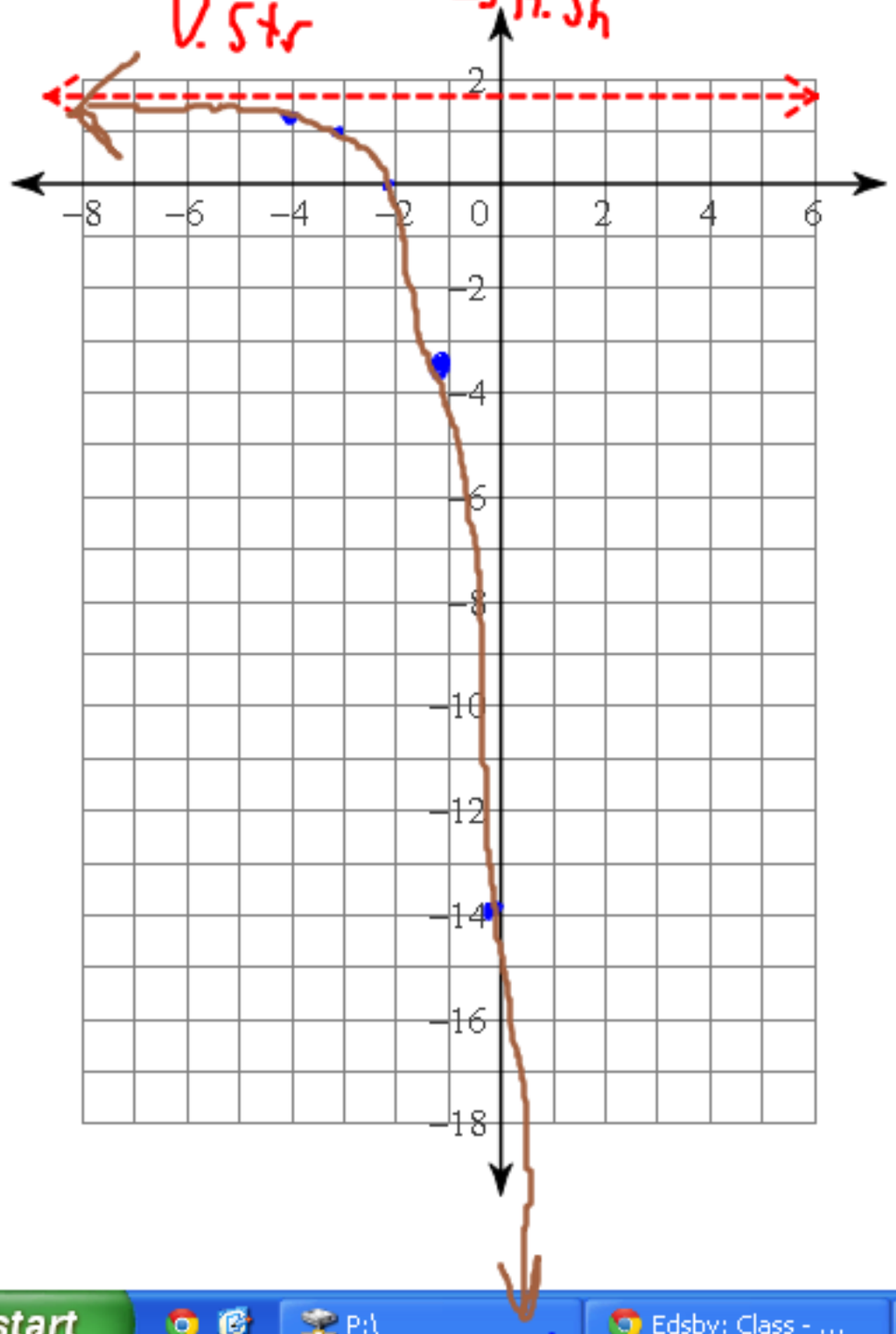


x	f(x)
−3	8
−2	4
−1	2
0	1
1	1/2
2	1/4
3	1/8

x+1	3y+1
−2	25
−1	13
0	7
1	4
2	2.5
3	1.75
4	1.375

6) $f(x) = -5 \cdot \left(\frac{1}{3}\right)^{x+1} + 2$

V.Str V.Sh H.Sh



3^x

x	y
−3	1/27
−2	1/9
−1	1/3
0	1
1	3
2	9
3	27

x − 1	−5y + 2
−4	1.8
−3	1.4
−2	1/3 = 0.33
−1	−3
0	−13
1	−43
2	−133

Try this one:

$$f(x) = \underset{\text{V.Sh}}{4}\left(\frac{1}{5}\right)^{\overset{\text{H.Sh}}{\uparrow}\,2(x+3)} \underset{\text{V.Sh}}{-9}$$

H.Sh

H.Sh

only come up with the tables.

x	$\left(\frac{1}{5}\right)^x$
-3	125
-2	25
-1	5
0	1
1	$\frac{1}{5}$
2	$\frac{1}{25}$
3	$\frac{1}{125}$

$\frac{1}{2}x - 3$	$4^y - 9$
-4.5	491
-4	91
-3.5	11
-3	-5
-2.5	-8.2
-2	-8.84
-1.5	-8.968

$$g(x) = \frac{1}{3}\left(\frac{4}{5}\right)^{\frac{1}{3}(x+8)} + 10$$

x	y	$3x-8$	$\frac{1}{3}y+10$
-3	1.95^-	-17	10.65^-
-2	1.562^5	-14	10.52
-1	1.25	-11	10.42
0	1	-8	10.33
1	0.8	-5	10.27
2	0.64	-2	10.21
3	0.512	1	10.17