

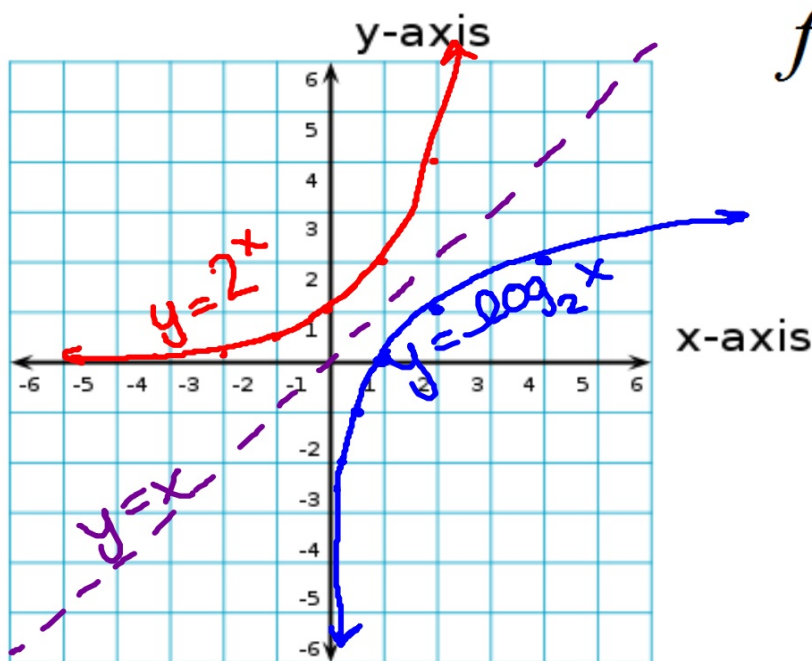
February 21, 2012

Alg2

Anything to correct?



2/21 - Graphs of Logarithmic Functions



$$f(x) = \log_2 x$$

$$y = \log_2 x$$

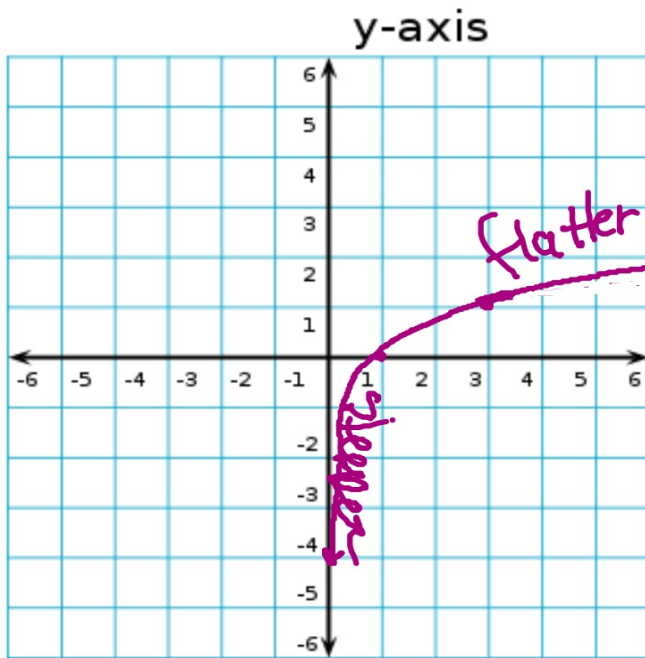
$$2^y = x$$

x	y
4	2
2	1
1	0
0.5	-1
0.25	-2

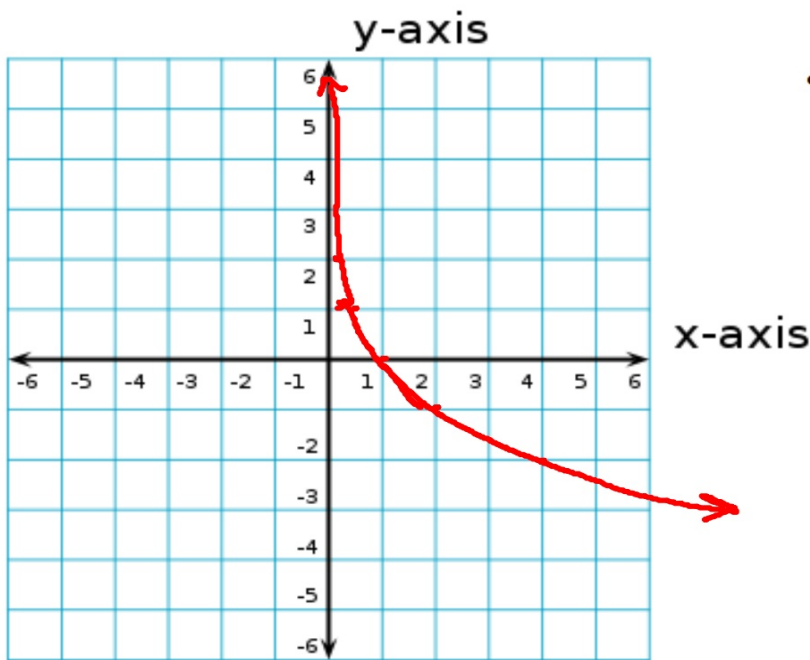
$$f(x) = \log_3 x$$

$$y = \log_3 x$$

$$3^y = x$$



x	y
9	2
3	1
1	0
$\frac{1}{3}$	-1
$\frac{1}{9}$	-2

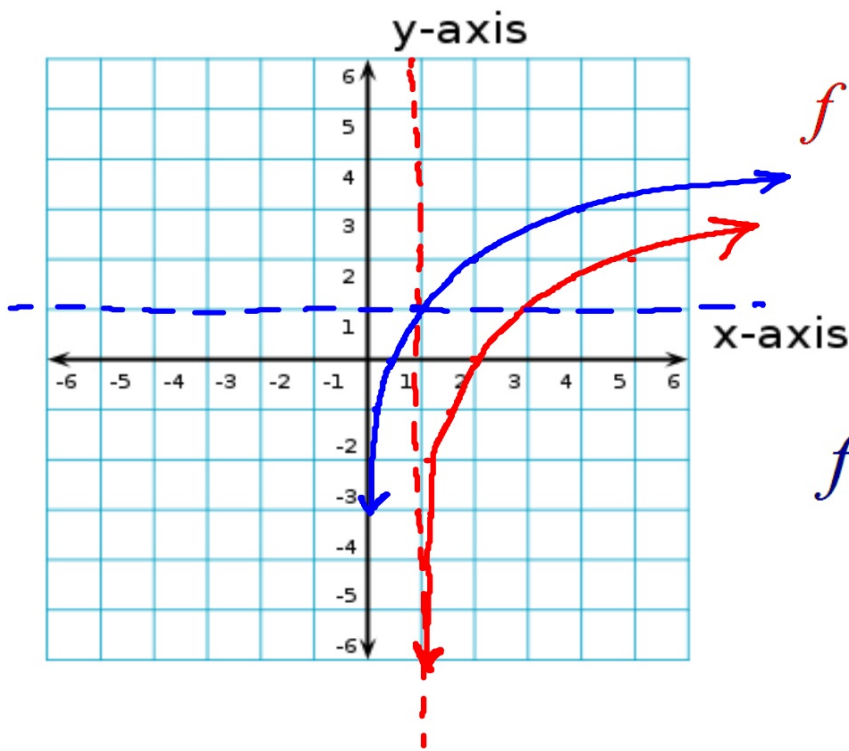


$$f(x) = \log_{\frac{1}{2}} x$$

$$y = \log_{\frac{1}{2}} x$$

$$\frac{1}{2}^y = x$$

x	y
1/4	2
1/2	1
1	0
2	-1
4	-2



$$f(x) = \log_2(x-1)$$

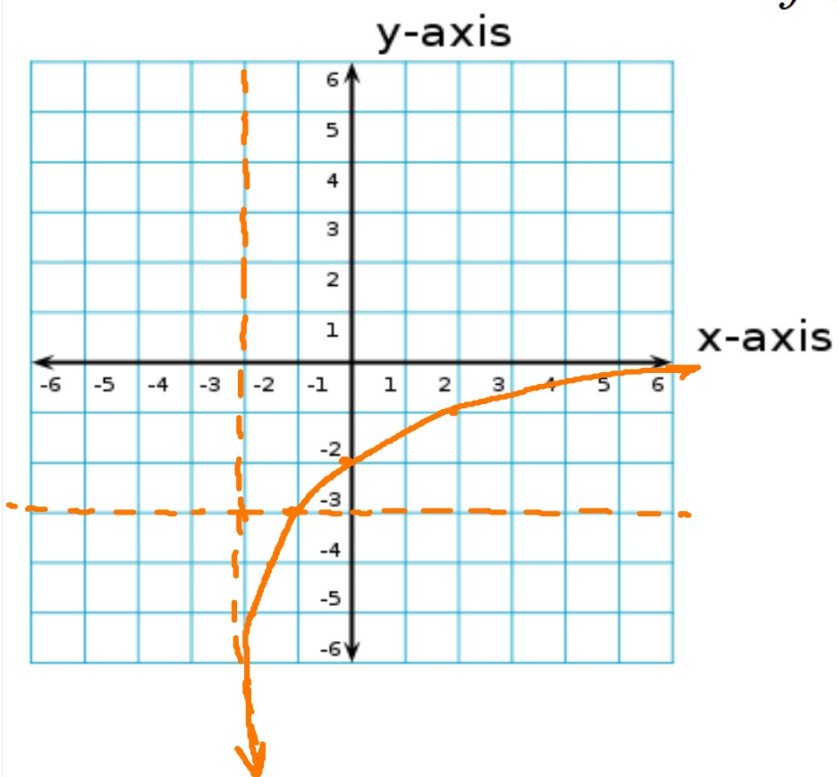
↑
Right 1

$$f(x) = \log_2(x+1)$$

↑
Up 1

$$f(x) = \log_2(x+2) - 3$$

↑ left
2
↑ down
3



Homework

Lilac *Logarithms WS3*

Due Thursday

Test Tuesday, 2/28
