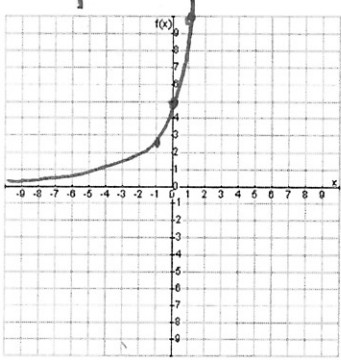


Graphing Homework

Name: Key

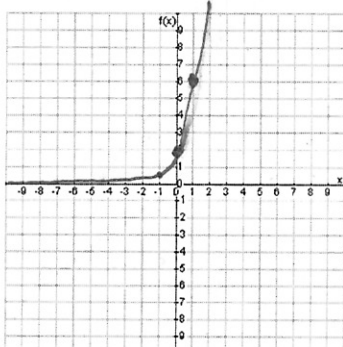
$$y = 5(2)^x$$

X	Y
0	$5(1) = 5$
1	$5(2) = 10$



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

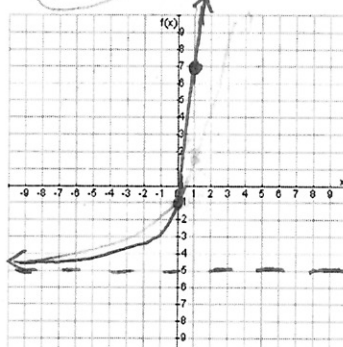
X	Y
0	$2(1) = 2$
1	$2(3) = 6$



$$y = 4e^x - 5$$

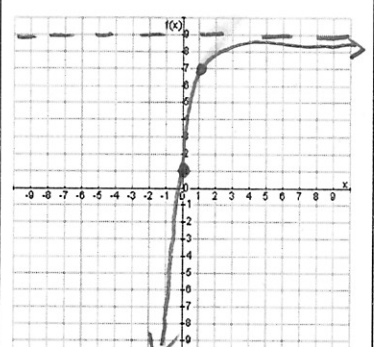
X	Y
0	$4(1) - 5 = -1$
1	$4(7) - 5 = 23$

$e \approx 3$



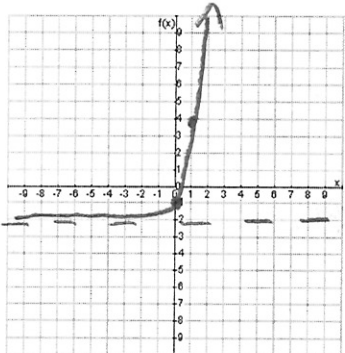
$$y = -8\left(\frac{1}{4}\right)^x + 9$$

X	Y
0	$-8(1) + 9 = 1$
1	$-8\left(\frac{1}{4}\right) + 9 = 7$



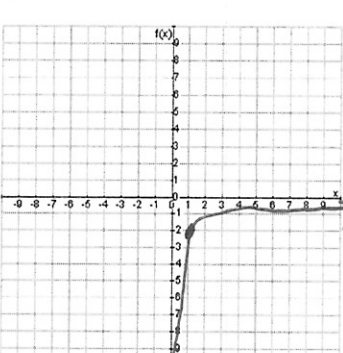
$$y = (6)^x - 2$$

X	Y
0	$1 - 2 = -1$
1	$6 - 2 = 4$



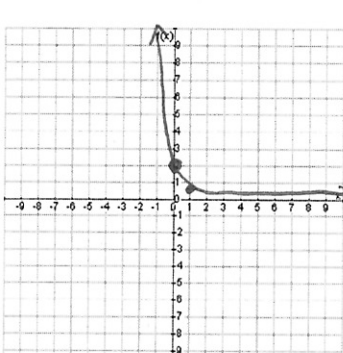
$$y = -10\left(\frac{1}{5}\right)^x$$

X	Y
0	$-10(1) = -10$
1	$-\frac{10}{5} = -2$



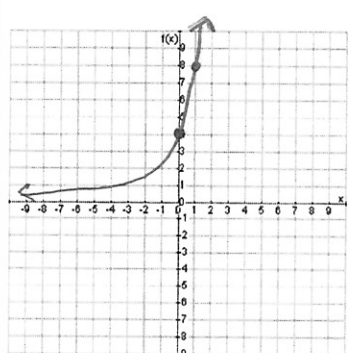
$$y = 2e^{-x}$$

X	Y
0	$2(1) = 2$
1	$2\left(\frac{1}{e}\right) = \frac{2}{e}$



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

X	Y
0	$4(1) = 4$
1	$4\left(\frac{1}{2}\right) = 2$



$$f(x) = -\log_5(x-2) + 1$$

x	f(x)
3	1
7	0

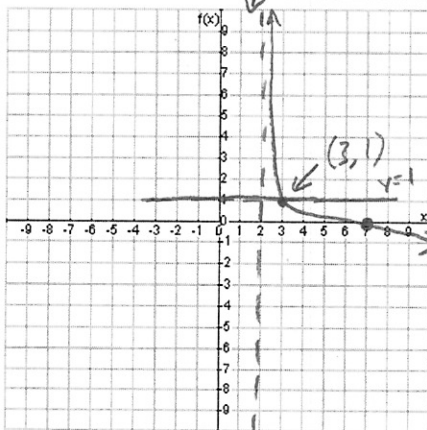
Asymptote: $x = 2$

Domain: $x > 2$

Solve: $f(x) = 1$
 $x = 3$

$$f(127) = -1 \log_5(125) + 1$$

$$5^3 = 125 \quad -1(3) + 1 = -2$$



$$g(x) = 4 \ln(x) - 5$$

x	g(x)
4	$4(1) - 5 = -1$
e	$4(1) - 5 = -1$

Asymptote: $x = 0$

Domain: $x > 0$

Solve: $g(x) = -1$
 $x = e$

On what interval is $g(x)$ negative? $0 < x < 3.2$

$$(0, 3.2)$$

