

# LOG REVIEW

#1-3 No graphing calculator  
Use pink sheet

#1-5 No decimal answers.

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

Left 1, Down 1  
horiz. asympt.

0	1
-1	2
-2	4
-3	8

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

log vertical asympt

-1	0
-2	1
-4	2
-9	3

- 2)
- 1) Make common bases
  - 2) Set exponents equal to each other.

$$4^{3x+1} = \frac{1}{16} x$$

$$4^{3x+1} = 4^{-2x}$$

$$3x+1 = -2x$$

- 3) Make common bases!

$$\log_9 \sqrt[3]{81}$$

$$\log_9 \sqrt[3]{9^2}$$

$$\log_9 9^{2/3} = \boxed{\frac{2}{3}}$$

4-5 1) Reduce each side to one log (Use properties)  
2) Exponentiate

7) Log + plog