

Math 3 Advanced  
15.1 Defining a Log f(x)

Rewrite expressions between logarithmic and exponential forms.

1.  $5^x = 125$

2.  $2^x = \frac{1}{16}$

3.  $2^{-x} = 128$

4.  $216 = 36^{x+1}$

5.  $128 = 4^{1-2n}$

6.  $64 = \left(\frac{1}{2}\right)^{2x}$

7.  $\log_n \frac{1}{25} = 2$

8.  $\log_x 81 = -4$

9.  $\log_2 r = 4$

10.  $\log_3 x = 3$

11.  $\log_4(3x - 2) = 2$

12.  $\log_8(2x + 1) = -1$