

Pre-Calculus

KEY

Rewrite a logarithmic function using the natural base (e). Verify using DESMOS.

1.  $y = \frac{\ln x}{\ln 6}$

2.  $y = \frac{\ln x}{\ln 4}$

3.  $y = \frac{\ln(2x)}{\ln 3}$

4.  $y = \frac{\ln(\frac{1}{2}x)}{\ln 5}$

5.  $y = \frac{\ln(x+5)}{\ln 2}$

6.  $y = \frac{\ln(x-8)}{\ln 7}$

7.  $y = \frac{\ln(x-4)}{\ln 3} + 7$

8.  $y = \frac{\ln(2x+1)}{\ln 6} - 9$

9.  $y = \frac{\ln(3x-4)}{\ln 8} + 8$

10.  $y = \frac{\ln(x+11)}{\ln 9} + 16$