3.5 Practice Activity

Practice 3.5-1-1:

Use the Change-of-Base Formula and a calculator to evaluate the logarithm, round it to nearest hundredth.

 $log_{\frac{1}{5}}(27)$

Practice 3.5-2-1:

Using the product, quotient, and power rules for logarithms, expand the logarithmic expressions. To check if it's fully expanded: 1) No fractions, 2) No multiplication, 3) No exponents.

$$\log_b\left(\frac{xy^8}{7z^3}\right)$$

Practice 3.5-3-1:

Using the product, quotient, and power rules for logarithms, condense the logarithmic expressions.

 $2\log_{b}(x) + \log_{b}(y) - 3\log_{b}(z) - \log_{b}(5)$