1 4.3: Review of Logarithmic Functions

Definition and Properties of Logarithms

Graphs of Logarithmic Functions:

Change of Base Formula

Examples:

Compute $\log_5 10 + \log_5 20 - 3 \log_5 2$. 
The formula to compute the amount of money $A$ in an account earning 100$r\%$ interest compounded $m$ times per year after $t$ years is $A = P \left(1 + \frac{r}{m}\right)^{mt}$. If $\$10,000$ are invested in a CD earning 4\% per year compounded monthly, when will the account have $\$15,000$?

Solve for $x$: $\log(x + 2) + \log(x + 11) = 1$

Compute $\lim_{x \to \infty} \ln(e^x + e^{-x}) - \ln(2e^x + e^{-x})$