

Logarithms

- Logarithms undo exponential functions.
- $\log_{10}(10^k) = k$
- Exponential functions undo logarithms.
- $10^{\log_{10}(w)} = w$
- To solve for x in $3^{x-5} = 2$ you use a logarithm.
- All logarithms are cousins: $\log_{10}(x) = \frac{\log_2(x)}{\log_2(10)}$
- Logarithms are an example of an inverse function.
- $f^{-1}(f(x)) = x$ and $f(f^{-1}(y)) = y$
- To compute the inverse of $f(x)$, write $y = f(x)$ and solve for x .