

## Logarithmic Graphs – Worksheet

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- Graph  $f(x) = 3^x$  and its inverse  $f^{-1}(x)$ . Name each graph.
- Graph each of the following. State Domain, Range and equation of any asymptotes.
  - $y = \log_2(x + 1)$
  - $y = \log_5(x + 3)$
  - $y = 2 + \log_8 x$
  - $y = 1 - \log_{10}(x - 1)$
  - $y = 4\log_{\frac{1}{2}}(2x)$
  - $y = \log_{10}(-x)$
  - $y = |\log_5 x|$
  - $y = \log_5|x|$
- Find the inverse function of  $y = 2^x - 1$ .