## MTH 30 LECTURE NOTES (Ojakian)

## Topic 16: Log Functions

## OUTLINE

(References: 4.3, 4.4)

1. Log Function
2. Graphing
3. Definition of Log

Inverse of exponential (when base is fixed)
(a) Maybe helpful - write exponential using EXP
(b) Examples: compute log from knowing exp.
(c) Defining formulas for inverse: $f(g(x))=x=g(f(x))$
(d) Visualize via graph
(e) Special base: Natural log
2. Tool: Equations in log and exp form

Tool for calculating log and converting between exp and log.
3. More on the graph
(a) Determine domain and range of log
(b) Find domain of shifted log.

