

MTH 30 LECTURE NOTES (Ojakian)

Topic 15: Log Functions

OUTLINE

(References: 4.3, 4.4)

1. Log Function
 2. Graphing
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1. 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) Special base: Natural log

2. Tool: Equations in log and exp form

Tool for calculating log and converting between exp and log.

3. Graphing

- (a) Inverse graph (reflected across diagonal $y = x$).
- (b) Asymptote
- (c) Determine domain and range of log
- (d) Graph transformations on log.