

# Chapter 3.6: Derivatives of Logs

## Calculus I

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1. Take the derivative of the following functions:

(a)  $h(x) = \ln(3)$

(b)  $h(x) = \ln(x)$

(c)  $h(x) = \ln(4593x)$

(d)  $h(x) = \ln(7x^4 + \sqrt{3x})$

(e)  $h(x) = 7^{\sqrt{x}}$

2. Derive an expression for the derivative of  $\log(x)$ , the base-10 logarithm.