

Calculus 141, Chapter 7 Summary ~ things you should know

notes by Tim Pilachowski

Important concepts:

inverse functions and their characteristics

exponent and logarithm properties, especially as applied to e and \ln

inverse trigonometric functions \sin^{-1} , \cos^{-1} and \tan^{-1}

L'Hôpital's Rule

Be able to:

find the inverse of a function, either in general or on a specified interval

given a function value and derivative value at a point, find the value of the derivative at the inverse point

evaluate derivatives and integrals involving functions of the forms b^x and $\log_b(x)$

find values of functions involving \sin^{-1} , \cos^{-1} and \tan^{-1}

find derivatives and integrals involving \sin^{-1} , \cos^{-1} and \tan^{-1}

use L'Hôpital's Rule to find a limit

Review exercises from the text:

Chapter 7 Review Exercises, numbers 1 – 12, 14, 15, 17, 19, 20, 22, 23, 25 – 30, 33, 34, 36 – 42, 51, 52, 55, 56, 59 – 66

Chapter 7-Cumulative Review for Chapters 1-6, numbers 1 – 9 and 13 – 18