Inverse Functions – Part II

UNIVERSITY OF MINNESOTA

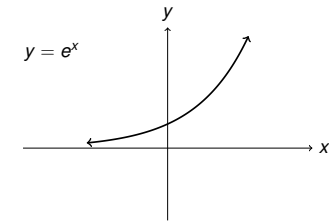
Preliminaries and Objectives

Preliminaries
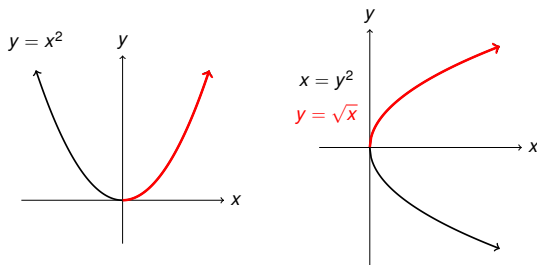- Inverse Functions
- One-to-One Functions

Objectives
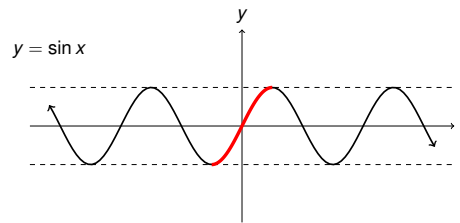- Define inverses for functions that are not one-to-one
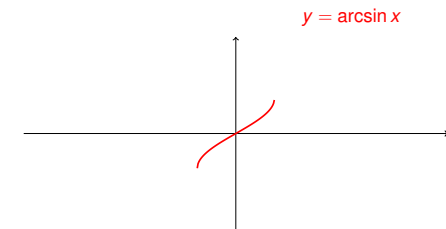

Exponential and Logarithm Function

$y = e^x$

Powers and Roots

$y = x^2$

$x = y^2$

$y = \sqrt{x}$

Wave Graphs

$y = \sin x$

Wave Graphs

$y = \arcsin x$

Recap

- To find an inverse function of a one-to-one function, interchange x and y.

- If the original function is not one-to-one, restrict the domain to a portion that is one-to-one.