Problem 1. Project Description

Abstract

The arccosine of x is defined as the inverse function of cosine of x where x lies in the range of $-1 \leq x \leq 1$

Domain and range: The domain of the arccosine function is from 1 to +1 inclusive and the range is from 0 to radians inclusive (or from 0 to 180).The arccosine function can be extended to the complex numbers, in which case the domain is all complex numbers.

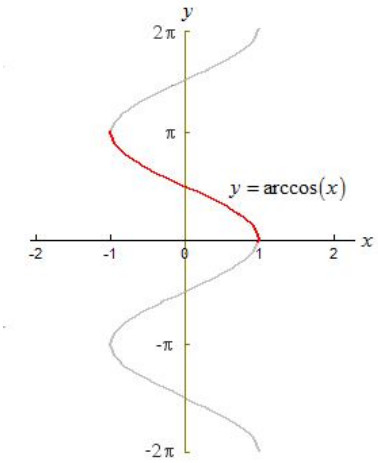

Figure 1: Figure 1: y = arccos(x)

Properties of the function y=arccos(x) that make it unique from other inverse trigonometric functions:

1. Domain is in the range of [-1,1].
2. Range is part of [0,π].
3. It is neither even or odd function.
4. It is a decreasing function.