Function:- arccos(x)

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1 Problem-1

1.1 Definition

The arccosine of x is defined as the inverse cosine function of x when -1≤x≤1. When the cosine of y is equal to x:

$$\cos y = x \tag{1}$$

Then the arccosine of x is equal to the inverse cosine function of x, which is equal to y:

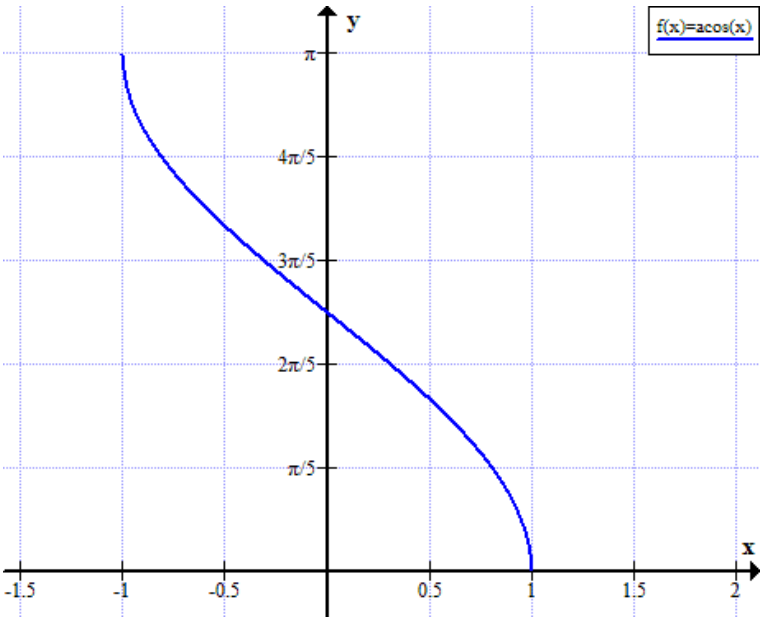
$$\arccos(x) = \cos^{-1} x = y \tag{2}$$

1.2 Domain and Range

The domain of arccos(x) is -1≤x≤1 and the range of arccos(x) is 0≤y≤π (0°≤y≤180°).

1.3 Characteristics of arccos(x)

- This function is neither even nor odd.
- It is a decreasing function.
- Graph of arccos(x)



References

[1] RapidTables,
https://www.rapidtables.com/math/trigonometry/arccos.html

[2] Emathhelp,
https://www.emathhelp.net/notes/algebra-2/trigonometry/function-y-arccos-x/