

Assignment-2

2021101113

Science - II

Q2

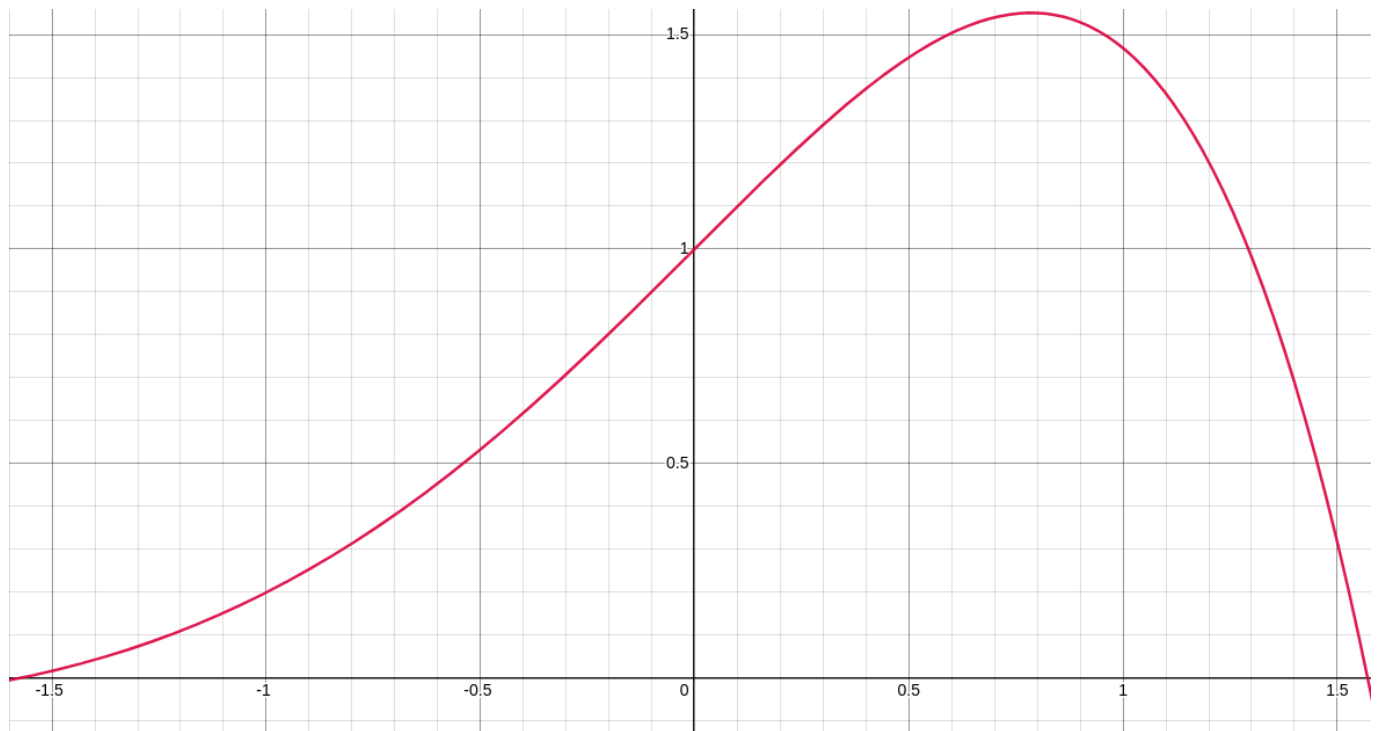
Gowlapalli Rohit

All these commands are tested on Ubuntu Version 20.04.3 LTS (Focal Fossa)

Q2

- |— Q2a.py
- |— Q2b.py
- |— Q2.pdf

$e^x \cos x$ in the range $[-\pi/2, \pi/2]$



DEFINITE INTEGRAL:

$$\int_{-\frac{\pi}{2}}^{\frac{\pi}{2}} f(x) \, dx =$$

$$\frac{e^{\frac{\pi}{2}}}{2} + \frac{e^{-\frac{\pi}{2}}}{2}$$

Simplify/rewrite:

$$\frac{e^{-\frac{\pi}{2}} (e^{\pi} + 1)}{2}$$

Approximation:

$$2.509178478658057$$

- Q2-part-b

