Homework 11

HU YAQI

November 14, 2020

1 Problem 1

Find the degree of precision of three formula:

Rectangular formula

Trapezoid formula

Simpson's rule

2 Problem 2

Given the differential equation to the right with its boundary conditions, find the value of $y(3)$, using Euler's method with 5 iterations.

$\frac{dy}{dx} = x^2 y$

y(0)=1