Homework 2: Report

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Problem 1:

a) Determine the largest value of Δt , for which the three-step Adams-Bashforth method (AB3)

Proof. We use the condition for absolute stability:

$$\lim_{k \to \infty} ||\boldsymbol{u}_k|| = 0 \tag{1}$$

b)

Problem 2: Implicit/Explicit Multistep Methods for ODEs

a)