

December 11, 2018

KMÜ 237-21/22 Engineering Mathematics

HOMEWORK 3 (Due December 18, 2018)

Name:..... Number:.....

1. Solve the following differential equation by

- a) partial fractions methods.
- b) successive integral methods.
- c) variation of parameters methods.

$$(D^2 - 1) y = 1 + e^{-x}$$

2. Solve the following initial value problem by using short method.

$$y'' + 2y = x^3 + x^2 + e^{-2x} + \cos 3x$$

$$y(0) = 0 \quad y'(0) = 0$$