

Fourier Analysis

Assignment 7

20181105

Name : _____

Student ID : _____

1. Evaluate the Laplace transform of the given function using appropriate theorems and examples from this section.

(a) $f(t) = 2t + 3$

(b) $f(t) = t \sin 4t$

(c) $f(t) = e^{2t} \sin 3t$

2. Evaluate the inverse Laplace transform of the given function.

(a) $F(s) = \frac{1}{s^2}$

(b) $F(s) = \frac{4}{3s^2+1}$

(c) $F(s) = \frac{s}{s^2+2s+1}$

Reading Materials : Section 8.1 of the textbook.