

Name: _____ ECE 3510 homework 3A Due: Fri, 1/19/24 c

1. Find the inverse Laplace transform of each of the following functions: Use partial fraction expansion and the tables.

a) $F(s) = \frac{1}{s^2 + 5s + 6}$

b) $F(s) = \frac{s - 1}{s \cdot (s + 2)}$

Answers (time functions below valid for $t \geq 0$ only)

1. a) $(e^{-2t} - e^{-3t}) \cdot u(t)$

b) $\left(\frac{3}{2} \cdot e^{-2t} - \frac{1}{2}\right) \cdot u(t)$