## EEL 301 Homework \#1

Question 1. (Ogata, Table A-1 on Pg. 864 \#20) Find the Laplace transform of $f(t)=$ $e^{-a t} \sin \omega t$.
Question 2. Using the Laplace transform method, solve the differential equation,

$$
\ddot{x}+2 \dot{x}+2 x=0, x(0)=0, \dot{x}(0)=10 .
$$

