1.   Problem 11.12d

2.   Problem 11.13b

3.   Solve the following differential equations using the initial conditions
$x(0) = 1, \dfrac{dx(0)}{dt} = 2$.

a) $\dfrac{d^2x}{dt^2} + 8\dfrac{dx}{dt} + 15x = (t-1)u(t-1)$

b) $\dfrac{d^2x}{dt^2} + 6\dfrac{dx}{dt} + 9x = 3u(t)$

c) $\dfrac{d^2x}{dt^2} + 4\dfrac{dx}{dt} + 20x = 2u(t)$

4.   Problem 11.36