

ENGR 3520
Extra Problem Set C

1. Solve the following differential equation using the initial condition $y = 15.625$ at $t = 0$.

$$(6t + 200) \frac{dy}{dt} + 6y = 250 - 0.05(6t + 200)y$$

2. Solve the following differential equation using the initial condition $y = 20$ at $t = 0$.

$$(3t + 100) \frac{dy}{dt} + 3y = 200 - 0.15(3t + 100)y$$