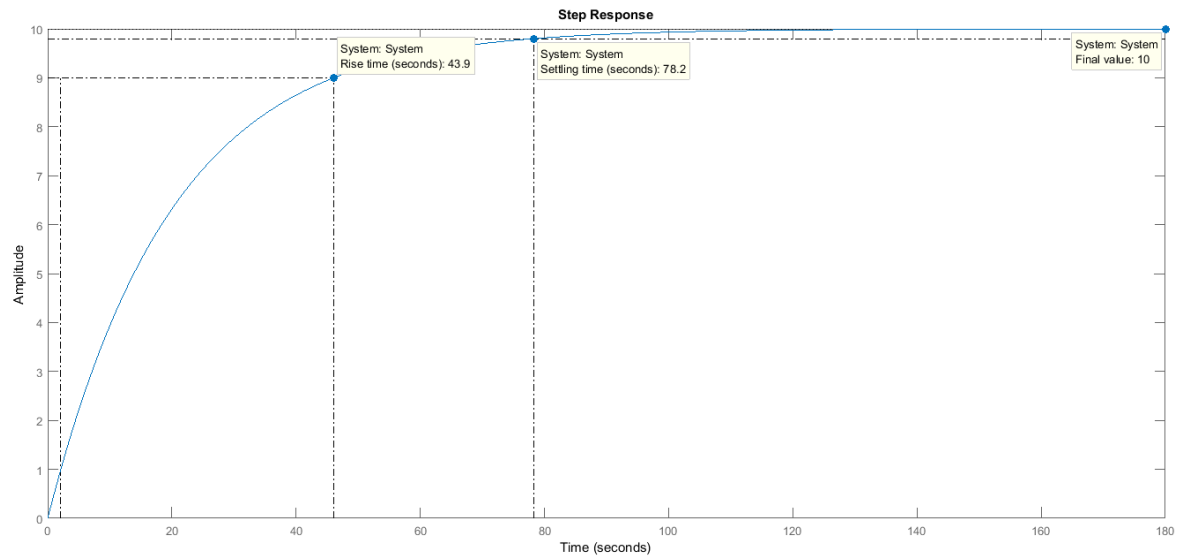


Exercise 3 - In-Lab Task 1

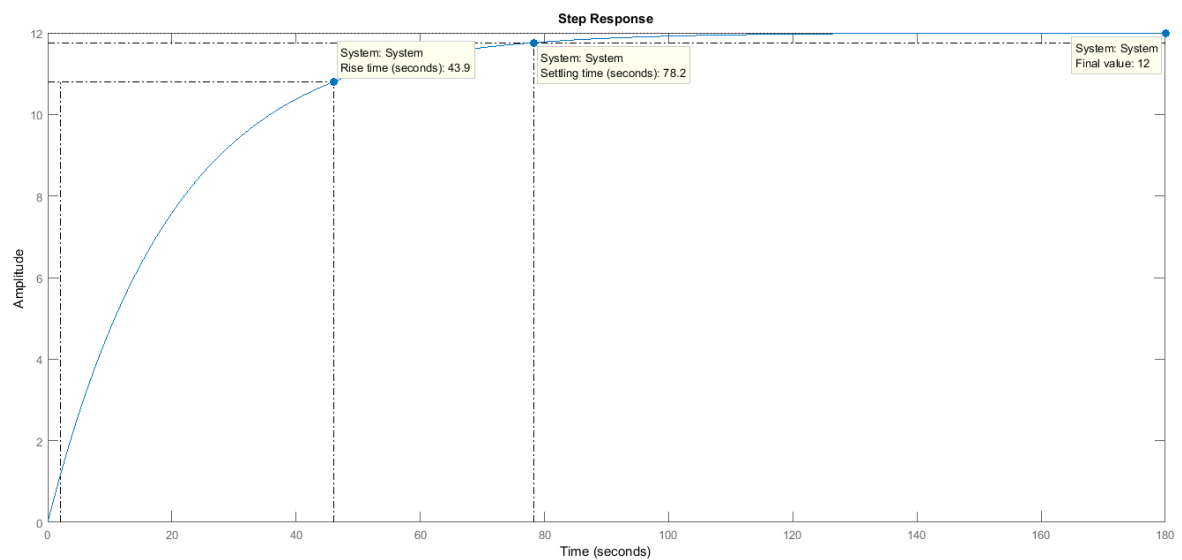
First Order Systems

First Order Mechanical System



Step Response

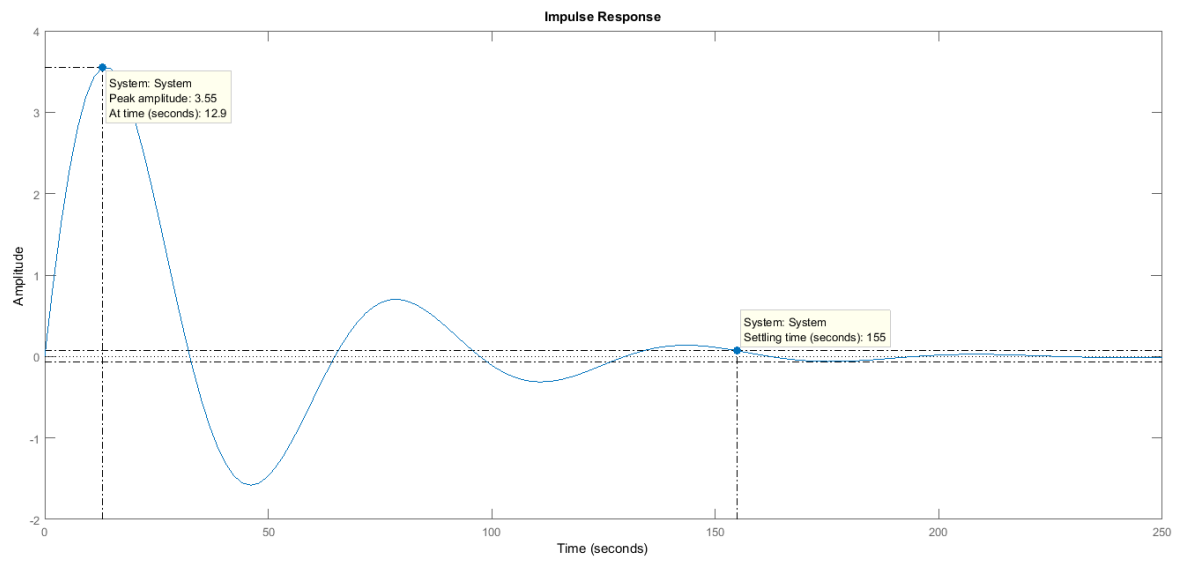
First Order Electrical System



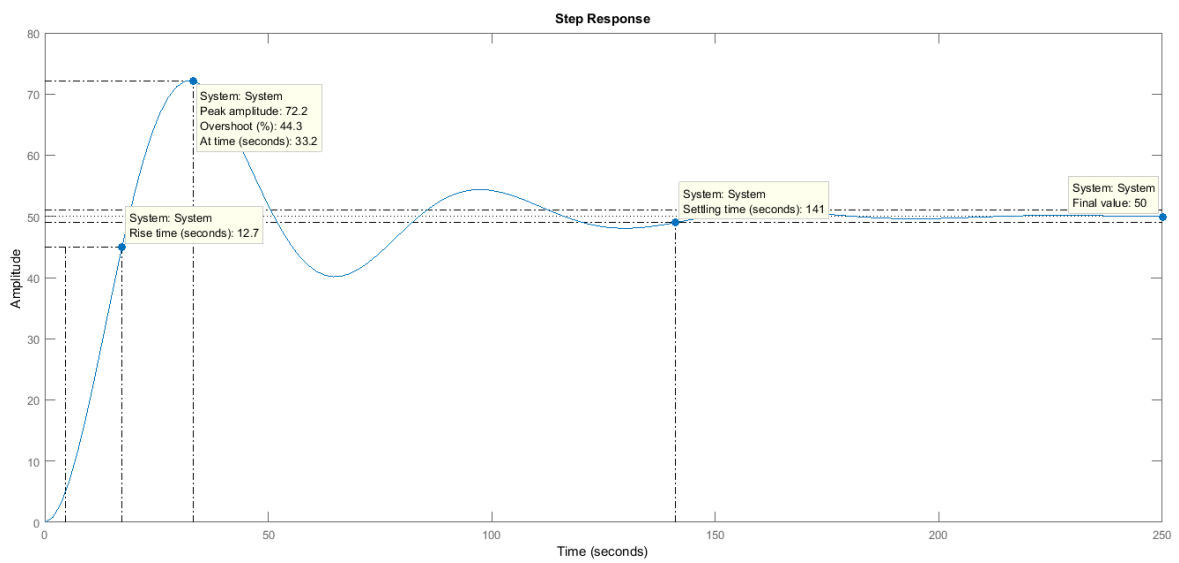
Step Response

Second Order Systems

Second Order Mechanical System

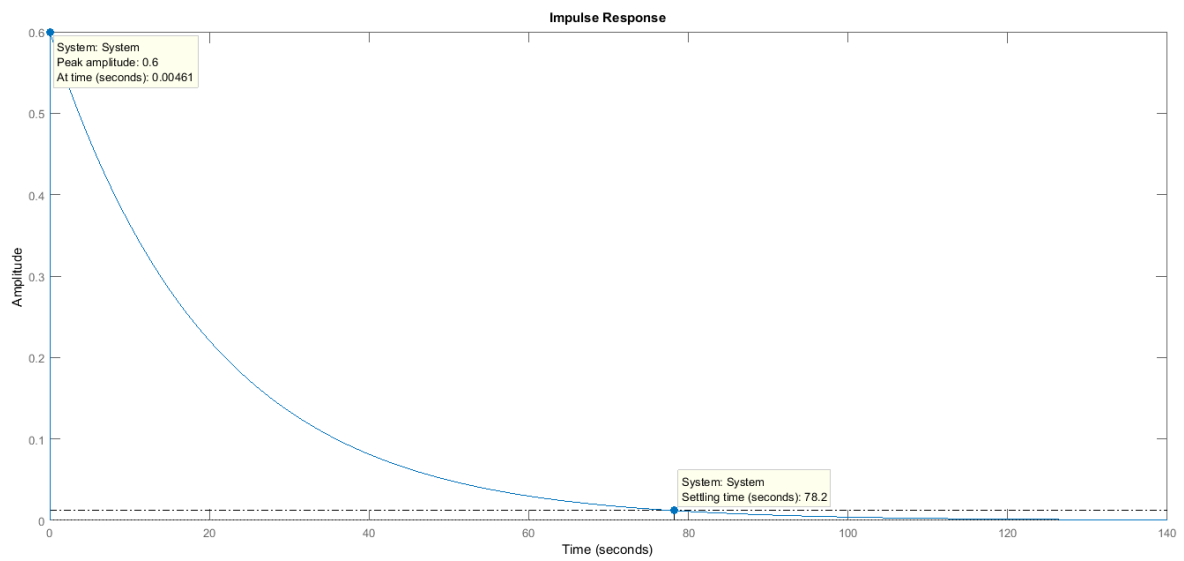


Impulse Response

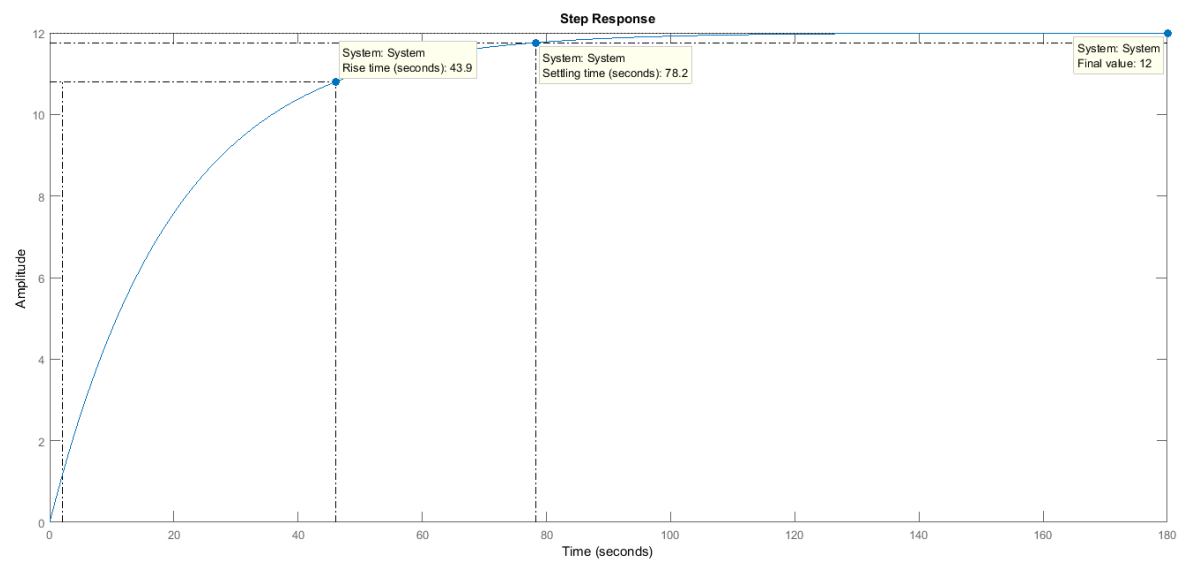


Step Response

Second Order Electrical System

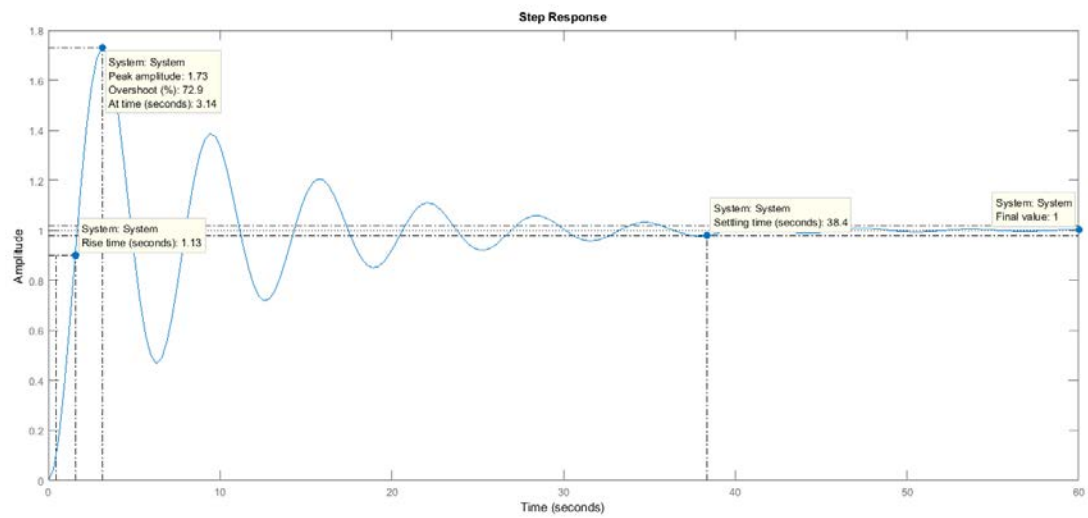


Impulse Response

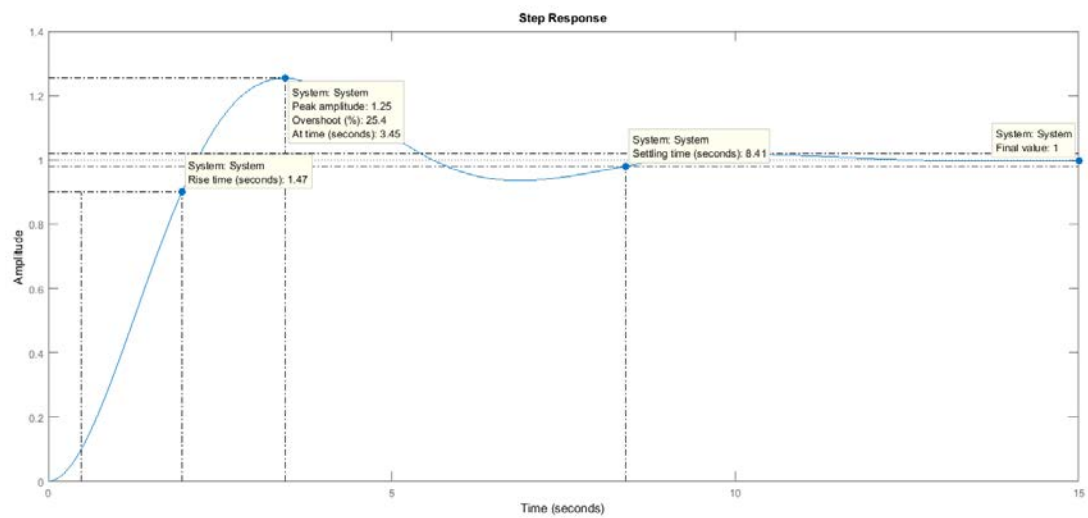


Step Response

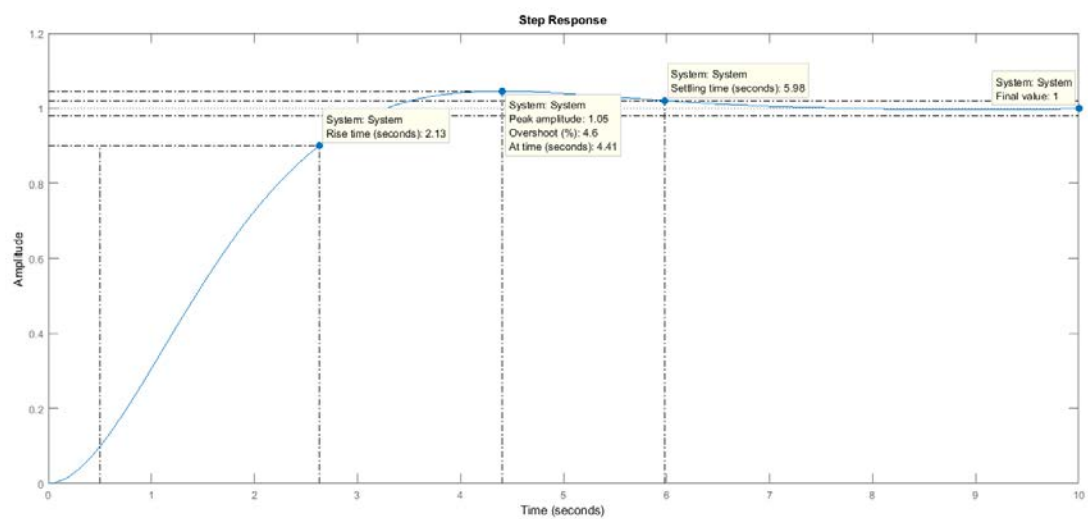
Exercise 3 - In-Lab Task 2



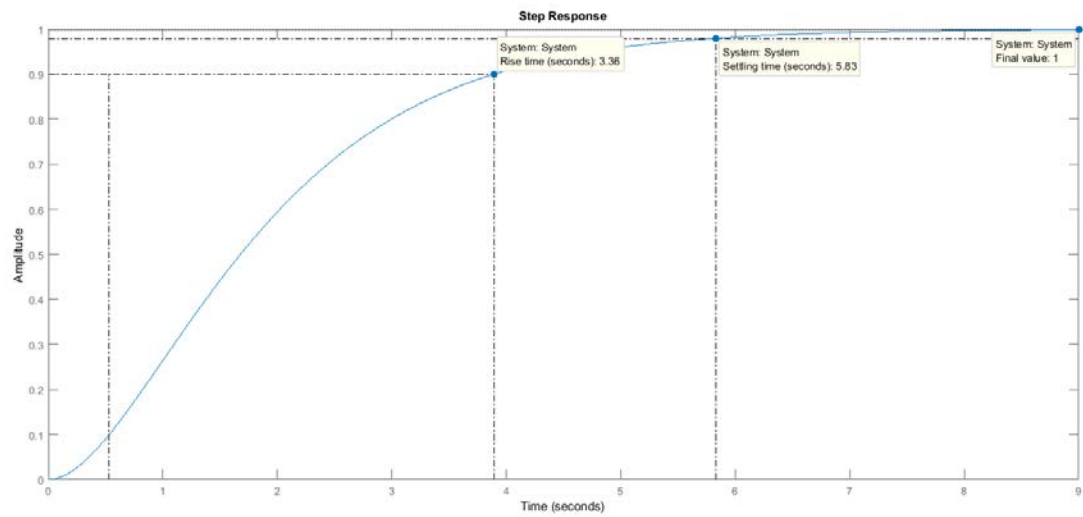
Damping Ratio $\zeta = 0.1$



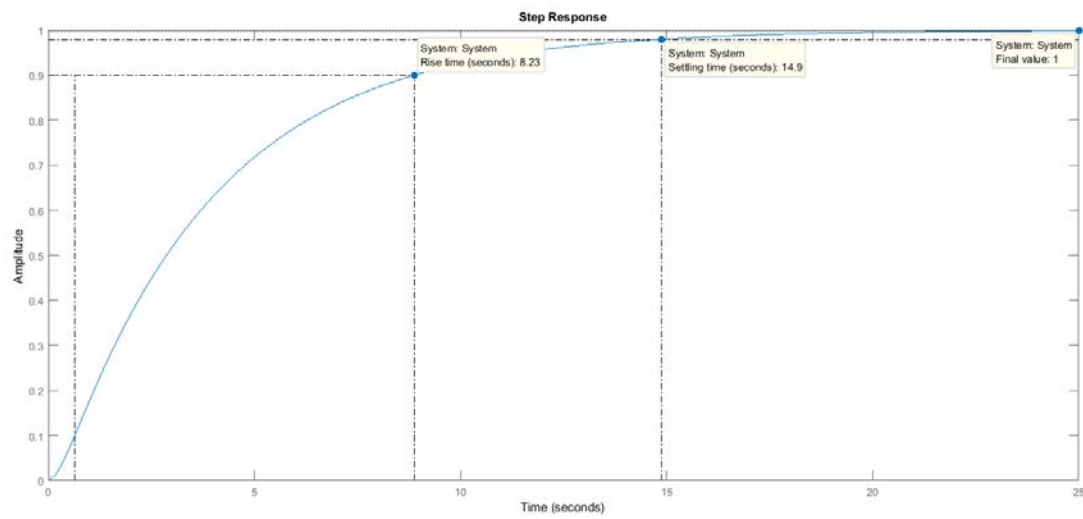
Damping Ratio $\zeta = 0.4$



Damping Ratio $\zeta = 0.7$



Damping Ratio $\zeta = 1.0$



Damping Ratio $\zeta = 2.0$