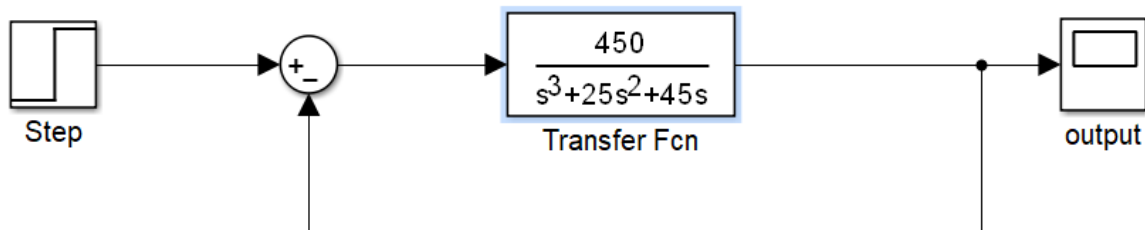
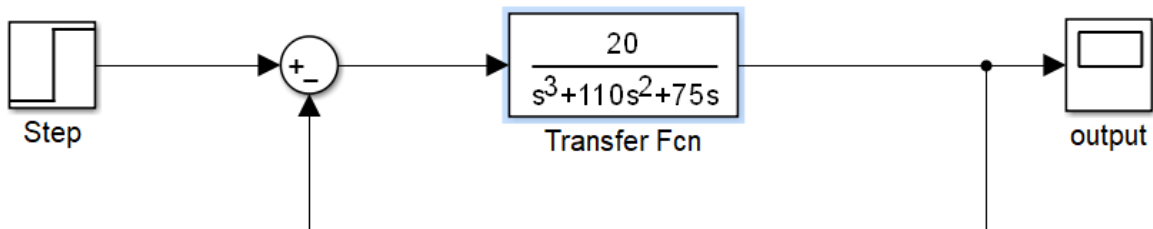


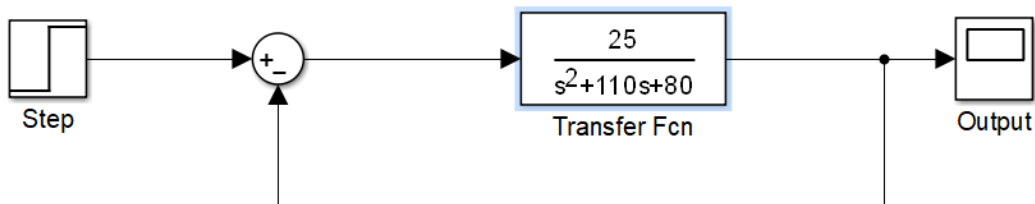
1. Lead design; Desired system is K_v of 12 sec^{-1} , PM of 55 degree, GM of at least 10 dB and Percent overshoot less than 15% .



2. Lag design; Desired system is K_v of 15 sec^{-1} , PM of 50 degree, GM of at least 10 dB and Percent overshoot less than 18% .



3. PI controller design; Desired system is K_v of 10 sec^{-1} , PM of 50 degree, GM of at least 10 dB and Percent overshoot less than 15% .



4. PD controller design; Desired system is K_v of 10 sec^{-1} , PM of 55 degree, GM of at least 10 dB and Percent overshoot less than 15% .

