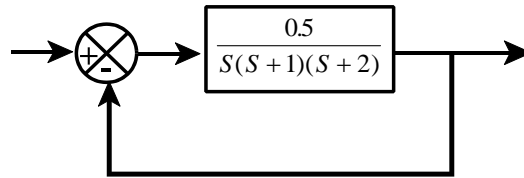


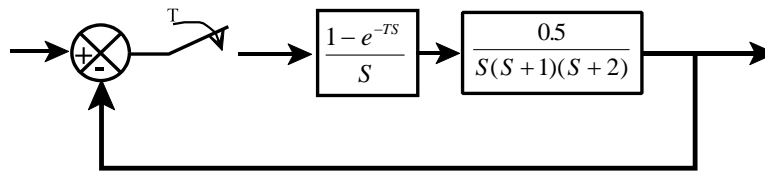
# EE 432-1, HW-6

Dr. Ahmad A. Masoud, Posted: Thursday Nov. 30, 2006, Due Sat. Dec. 9, 2006

Consider the unity feedback system shown below:



Assume a digital controller is used instead of the continuous control system above:



- compute the continuous unit step response of the discrete control system for  $T=1$  sec and  $T=.01$  sec,
- compare the maximum percent overshoot and the setting time obtained for the two sampling period with those obtained from the continuous control system.