

24-352 DYNAMIC SYSTEMS & CONTROL

HOMEWORK ASSIGNMENT #9

DUE 3/21/01

PROBLEMS

From the textbook

5.16 b and c, 8.34, 8.39 a.

1. Suppose you have an input voltage, $e_r(t)$, and a measured voltage, $e_T(t)$. Use the concepts discussed in class to define a circuit that will give an output voltage equal to

$$10(e_r - e_T) + 4(\dot{e}_r - \dot{e}_T)$$

2. Instead, in problem 1 design a circuit that will give an output voltage equal to

$$3 \int (e_r - e_T) dt$$