

Due on 11/11/05

(1) Textbook problem 7.5

(2) Textbook problem 7.6

(3) Textbook problem 7.13 (Hint: At steady-state $\dot{x} = 0$)

(4) For the system in problem 7.13, if $u=0$ and $x(0) = \begin{bmatrix} 1 \\ -1 \end{bmatrix}$, find $x(2)$. (Hint: find the transition matrix $\Phi(t)$)

(5) Transform the system in problem 7.13 into a modal canonical form.

(6) Textbook problem 7.14 (b)

(7) Textbook problem 7.15 (a) (no need to find the transfer function).

(8) Textbook problem 7.16.