Section 7.4

- T/F Review 2. True. (Thm 7.4.8)
- T/F Review 4. False. Only if A is diagonalisable. $\left(\begin{smallmatrix} 2 & 2 \\ 0 & 2 \end{smallmatrix}\right)$, and $\left(\begin{smallmatrix} 2 & 1 \\ 0 & 2 \end{smallmatrix}\right)$ have the same eigen value,vector pairs.
- Problem 6. $c_1e^{-t}(-6,1,0) + c_2e^{-t}(1,0,1) + c_3e^{4t}(0,1,1)$
- Problem 20. Substitution $x = x_1$, $x' = x_2$.
- Problem 26. One of the eigenvalues is 0.

Section 7.5

- T/F Review 2. True
- T/F Review 4. False.
- Problem 16. Differentiate X, plug into $X' = AX$ and check.

Section 7.8

- T/F Review 2. True
- Problem 6.
- Problem 10.