

All problems are to be written up clearly and thoroughly, using complete sentences. This assignment is due in discussion at 2pm on Tuesday, February 18th.

For all T/F problems on the homework, provide a brief justification for your answer. That may be citing an appropriate theorem or providing a counterexample.

1. From the book:

Section 6.6 problems 6, 7, 10

Section 6.7 problems 1, 2 a, b, c, 3 a, b, 4

2. Use the Cayley–Hamilton theorem to find A^{-1} given the matrix

$$A = \begin{pmatrix} 1 & 1 & 2 \\ 1 & 2 & 2 \\ 1 & 2 & 1 \end{pmatrix}.$$