MATH 317 Homework No. 5

Reading
Sections 3.1 and 4.1

Assignment to be handed in by Thursday October 4-th Problems in bold face will be graded

Exercises
Section 3.4: Exercise 1) c, 2) a, 3) a, 4) a, 5) a, 3) f, 4) e
Section 4.1: Exercise 3, 8.

Proofs
Section 3.4 13, 18, 19.
Also Prove the following (This proof will be graded as well):
Consider a matrix $A$ and two eigenvectors $\vec{v}_1$ and $\vec{v}_2$ corresponding to two eigenvalues $\lambda_1$ and $\lambda_2$, respectively, with $\lambda_1 \neq \lambda_2$. Prove that $\vec{v}_1$ and $\vec{v}_2$ are linearly independent.