

# MATH 307

## Individual Homework 20

Instructions: Read textbook pages 106 to 111 before working on the homework problems. Show all steps to get full credits.

1. Let  $A = \begin{pmatrix} 3 & 2 & 1 \\ 6 & 6 & 3 \\ 3 & 0 & -1 \end{pmatrix}$ , find LU decomposition of  $A$ . Note  $L$  is a lower triangular matrix with 1 on the diagonals so its determinant is 1.