Math 272: Linear Algebra with Applications
HW for Section 4.5

1. For each of the following matrices, find rank(A), and find a basis for col(A), row(A), null(A).

a) $A = \begin{bmatrix} 1 & 0 & 1 & 0 \\ -2 & -1 & 3 & 2 \\ 3 & 1 & -2 & -1 \end{bmatrix}$

b) $A = \begin{bmatrix} 3 & -3 & 3 & 9 \\ 2 & -1 & 4 & 7 \\ 3 & -5 & -1 & 7 \end{bmatrix}$