MA 35100

HW # 4 - due Wednesday, September 25

1. Page 109: #2.3(a).

2. Let $A = \begin{bmatrix} 1 & 0 & -2 & 1 \\ 2 & 0 & -4 & 0 \\ -1 & 0 & 2 & 1 \end{bmatrix}$.

Find a *minimal* spanning set for the following subspaces:

(a) $\text{Col}\,(A)$.

(b) $\text{Row}\,(A)$.

(c) $\text{Row}\,(A^t)$.

(d) $\text{Null}\,(A)$.

3. Page 122: **T/F Question**: **# 2.10, 2.11**.

4. Page 39: #1.53.

5. Page 85: #1.25, 1.26.

6. **TRUE or FALSE** ? (Justify your answer)

$$\mathsf{Span}\left\{(1+x+x^2),\,(2-x^2),\,(2+x^2),\,3,\,(1-x)\right\} = \mathsf{Span}\left\{(2+x^2),\,(1+x+x^2),\,(2+x^2)\right\}.$$