

Homework 4: Due Feb 15th (Friday)

(1) Row reduce the following matrices. (Make sure you specify your row operations.)

(a)

$$\begin{bmatrix} 1 & 5 & 6 & 2 \\ 2 & 11 & 11 & 5 \\ 3 & 10 & 20 & 5 \end{bmatrix}$$

(b)

$$\begin{bmatrix} 2 & 4 & 6 \\ 3 & 6 & 7 \\ 5 & 10 & 2 \end{bmatrix}$$

(c)

$$\begin{bmatrix} 7 & 3 \\ 5 & 9 \\ 1 & -2 \\ 3 & 0 \end{bmatrix}$$

(2) Solve the following system of equation:

$$\begin{array}{rcl} 2a + 3b + 4c & = & 5 \\ a + 2b + c & = & 0 \\ 3a + b + 2c & = & -4 \end{array}$$