Some MATLAB Practice Exercises
for Linear Algebra Students

Exercise 1

Enter the augmented matrix for the system of equations

$$x + 2y + 3z = 112$$
$$4x + 9y + 12z = 464$$
$$5x + 11y + 16z = 602$$

and then use MATLAB to carry out the elementary row operations to find the reduced row echelon form for the coefficient matrix. Find all solutions of the original system or explain why there are no solutions.

Exercise 2

Same directions as Exercise 1 for the system

$$x_1 + 2y - 3z = 7$$
$$2x_1 + 4y + 3z - 2w = 8$$
$$3x_1 + y + 2z - w = 10$$
$$2x_1 - y + 3z + 3w = 15$$