

MATH 260, Linear Algebra, Spring '14

Homework 3 & 4: Matrices, RREF, and Solutions to Systems

Honor Code:

Names:

1 Homework

Due Feb. 11th

On page 143: 14, 16, 18, 20, 22

AND: Write # 28 and # 32 in matrix-vector form and as an augmented matrix.

By converting each of these systems into augmented matrices, then putting the matrices in RREF, determine if the system has a unique, infinite solutions, or no solution.

$$\begin{array}{rclclcl} x+ & 2y+ & z & = & 2 & & x- & y+ & z & = & 0 & & x- & y- & z & = & 1 \\ 2x- & 4y- & 3z & = & 0 & & x+ & y & & = & 0 & & 2x+ & 3y+ & z & = & 2 \\ -x+ & 6y- & 4z & = & 2 & & x+ & 2y & -z & = & 0 & & & & & & \\ x- & y & & = & 4 & & & & & & & & & & & \end{array}$$