

MATH 1553
QUIZ #2: §§2.2, 2.3

Name		Section	

1. [5 points] Put the following matrix into reduced row echelon form using elementary row operations. Show your work.

$$\begin{pmatrix} -3 & 2 & 0 & -1 \\ 3 & -4 & 5 & -4 \\ 1 & -1 & 1 & -1 \\ 4 & -2 & -2 & 4 \end{pmatrix}$$

2. [1 point each] For each of the following augmented matrices, circling 0, 1, or ∞ to indicate how many solutions the corresponding system of linear equations has.

$$\left(\begin{array}{ccc|c} 1 & 0 & 2 & 1 \\ 0 & 0 & 1 & 5 \\ \hline 0 & 1 & \infty \end{array} \right)$$

$$\left(\begin{array}{ccc|c} 1 & 0 & 2 & 1 \\ 0 & 0 & 0 & 5 \\ \hline 0 & 1 & \infty \end{array} \right)$$

$$\left(\begin{array}{ccc|c} 0 & 1 & 2 & 1 \\ 0 & 0 & 1 & 5 \\ \hline 0 & 1 & \infty \end{array} \right)$$

$$\left(\begin{array}{cc|c} 1 & 2 & 1 \\ 0 & 1 & 5 \\ \hline 0 & 1 & \infty \end{array} \right)$$

$$\left(\begin{array}{ccc|c} 1 & 0 & 2 & 0 \\ 0 & 0 & 0 & 0 \\ \hline 0 & 1 & \infty \end{array} \right)$$