

Section 1.2 Part II: Row Reduction and Echelon Forms

MATH 204: Linear Algebra

Prepare for class August 31, 2018

Name (Print): _____

After reading/rereading Section 1.2 (pages 12-21), answer the following questions.

1. Write down the **The Row Reduction Algorithm**:

Step 1: _____

Step 2: _____

Step 3: _____

Step 4: _____

Step 5: _____

2. Write down the definitions of the following:

(a) basic variable

(b) free variable

3. State Theorem 2: Existence and Uniqueness Theorem.

4. Start working on the following example: Apply the Row Reduction Algorithm to transform the following matrix to RREF. We will complete this in class.

$$\begin{bmatrix} 0 & 4 & 4 & 8 & 2 & 4 \\ 3 & 1 & 7 & 11 & 0 & 6 \\ 2 & 2 & 6 & 10 & 1 & 8 \end{bmatrix}$$