**PreCalculus Review 8.1/8.2 Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Determine the order of each matrix.**

**Write the augmented matrix for the system of linear equations.**

**Use the elementary row operations indicated to obtain the new row-equivalent matrix.**

*R*1

*R3*

*-3R1 + R3*

**Detremine whether each matrix is in row-echelon form, reduced row-echelon form or neither.**

a) row-echelon form a) row-echelon form

b) reduced row-echelon form b) reduced row-echelon form

c) neither c) neither

**Write the system of linear equations represented by the augmented matrix. Then use back substitution to solve. (Use variables *x*, *y*, and *z*)**

**Write the matrix in row-echelon form. Show your work, including the elementary row operations used.**

**Use matrices to solve the system of equations. Use either row-echelon with back substitution or reduced row echelon form. Show your work, including the elementary row operations used.**

**Use the matrix capabilities of a graphing calculator to reduce the augmented matrix corresponding to the system of equations, and solve the system.**

**Use the equivalent matrices to find *x* and *y*.**

**Perform the matrix operations. If it is not possible, explain why.**

**If possible, find the product *AB* and *BA*. Use**  and

**Evaluate each expression, if possible.**

**Determine the order of each matrix.**

**Write the augmented matrix for the system of linear equations.**

**Use the elementary row operations indicated to obtain the new row-equivalent matrix.**

*R*1

*R3*

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**b) reduced row-echelon form** b) reduced row-echelon form

c) neither c) neither

**Write the system of linear equations represented by the augmented matrix. Then use back substitution to solve. (Use variables *x*, *y*, and *z*)**

**Write the matrix in row-echelon form. Show your work, including the elementary row operations used.**

**Use matrices to solve the system of equations. Use either row-echelon with back substitution or reduced row echelon form. Show your work, including the elementary row operations used.**

**Use the matrix capabilities of a graphing calculator to reduce the augmented matrix corresponding to the system of equations, and solve the system.**

**Use the equivalent matrices to find *x* and *y*.**

**and**

**Perform the matrix operations. If it is not possible, explain why.**

**can’t subtract (dimensions do not match)**

**If possible, find the product *AB* and *BA*. Use**  and

**Evaluate each expression, if possible.**

**can’t be multiplied**