

Directions: This assessment has 2 questions, for a total of 20 points. You must show all of your work to receive full credit for an answer. Remember, you may not use a calculator or any other resources during this assessment. Good luck!!

Name: _____

1. (10 points) Find all solutions of the linear system by **eliminating variables**.

$$\left| \begin{array}{rcl} 2x_1 + 4x_2 + 6x_3 & = & 4 \\ x_1 + 2x_2 + 5x_3 & = & 4 \\ 3x_1 + 3x_2 + 6x_3 & = & 3 \end{array} \right|$$

2. (10 points) Find all solutions of the system using **Gauss-Jordan elimination**.

$$\left| \begin{array}{rcl} x_1 + x_2 & = & 1 \\ x_1 + x_3 & = & 1 \\ -x_2 + x_3 & = & 0 \end{array} \right|$$