

Name: \_\_\_\_\_

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**Math 2250, Fall 2011, Quiz 2**  
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1. Convert to reduced row-echelon form:

$$\left[ \begin{array}{cccc|c} 2 & 2 & -2 & 2 & 2 \\ 1 & 1 & 1 & 5 & 3 \\ 0 & 0 & 2 & 4 & 2 \end{array} \right]$$

2. Write the general solution to the corresponding inhomogeneous equation

$$\begin{aligned} 2x_1 + 2x_2 - 2x_3 + 2x_4 &= 2 \\ x_1 + x_2 + x_3 + 5x_4 &= 3 \\ 2x_3 + 4x_4 &= 2 \end{aligned}$$

3. Give one particular solution to the inhomogeneous equation.
4. Write the general solution to the corresponding homogeneous equation.