## MATH 21B, JANUARY 26: INTRODUCTION TO SYSTEMS OF LINEAR EQUATIONS

(1) Solve the following systems using the method of elimination:

$$\begin{vmatrix} 2x &+ 4y &- 2z &= -10 \\ 3x &+ 6y &= -12 \end{vmatrix}$$

$$\begin{vmatrix} x &+ y &= 2\\ 2x &- y &= 1\\ -x &+ y &= 1 \end{vmatrix}$$

(2) For which values of k is the following system inconsistent? One solution? More than one solution?

$$\begin{vmatrix} 2x &+ & 2y &+ & kz &= & 3 \\ kx &+ & ky &+ & 8z &= & k+2 \end{vmatrix}$$