EE 2240

Problem #07

Use Cramer's Rule to solve for V_x.

$$\begin{bmatrix} 1 & 0 & 0 & 0 & 0 & 0 & -5 \\ 0 & 0 & 1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 1 & 0 & -0.2 & 0 \\ -1/45 & 17/225 & -1/30 & -1/50 & -0.02 & 0 & 0 \\ 0 & 0 & 1 & -1 & 1 & 0 & 0 \\ 0 & 1 & 0 & -1 & 0 & 1 & 0 \\ 0 & 1/50 & 0 & -1/50 & 0 & 0 & 1 \end{bmatrix} \begin{bmatrix} V_1 \\ V_2 \\ V_3 \\ V_4 \\ V_x \\ V_y \\ I_y \end{bmatrix} = \begin{bmatrix} 0 \\ 100 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \end{bmatrix}$$