

ECO138 Quiz 1 (March 9, 2018)

ID:

Name:

Consider **Leontief Model** with 3 sectors. The economy is producing 3 outputs, X1, X2 and X3. A matrix is an input-output matrix and d vector indicates the final demand. Solve for **X1** using **Cramer's Rule** given Leontief Model setting. (HINT: Start with $X=AX + d$)

$$A = \begin{pmatrix} 0.1 & 0 & 0.2 \\ 0.3 & 0.2 & 0 \\ 0 & 0.4 & 0.1 \end{pmatrix}, \quad d = \begin{pmatrix} 10 \\ 30 \\ 50 \end{pmatrix}$$