q.1 $Ax = f$

$$\begin{bmatrix} -1 & 0 & 0 \\ d_2 & -1 & 0 \\ 0 & d_3 & -1 \end{bmatrix} \begin{bmatrix} x_1 \\ x_2 \\ x_3 \end{bmatrix} = \begin{bmatrix} f_1 \\ f_2 \\ f_3 \end{bmatrix}$$

$-x_1 = f_1$

$d_2 x_1 + x_2 = f_2$

$d_2 x_2 + x_3 = f_3$

$x_1 = -f_1$

$x_2 = f_2 - d_2 x_1$

$x_3 = f_3 - d_2 x_2$

$\left. \begin{array}{c} n = 3, \\ 2 \text{ subs} \\ 2 \text{ mults} \end{array} \right\}$