

Solution of the System of Linear Equations:

$$\begin{cases} 18x_1 + 9.4938x_2 = 58392 \\ -0.0382x_1 + 8593x_2 = 93824 \end{cases} \quad (1)$$

Solution using Cramer's Method:

$$\text{Determinant of } A : \Delta = \det \begin{vmatrix} 18 & 9.4938 \\ -0.0382 & 8593 \end{vmatrix} = 154674 \quad (2)$$

$$\Delta_1 = \det \begin{vmatrix} 58392 & 9.4938 \\ 93824 & 8593 \end{vmatrix} = 5.00872e + 08 \quad (3)$$

$$x_1 = \frac{\Delta_1}{\Delta} = \frac{5.00872e + 08}{154674} = 3238.23 \quad (4)$$

$$\Delta_2 = \det \begin{vmatrix} 18 & 58392 \\ -0.0382 & 93824 \end{vmatrix} = 1.69106e + 06 \quad (5)$$

$$x_2 = \frac{\Delta_2}{\Delta} = \frac{1.69106e + 06}{154674} = 10.9331 \quad (6)$$

Answer:

$$\begin{cases} x_1 = 3238.23 \\ x_2 = 10.9331 \end{cases} \quad (7)$$