

$$1. (x_1, x_2, x_3, x_4) = [0.17677633 \quad 0.0126921 \quad -0.0206612 \quad -1.18326429]$$

$$(x_1, x_2, x_3, x_4) = [0.17677633 \quad 0.0126921 \quad -0.0206612 \quad -1.18326429]$$

$$2. \begin{bmatrix} 0.27969349 & -0.08045977 & 0.03831418 & -0.01532567 \\ -0.08045977 & 0.37931034 & 0.05747126 & -0.02298851 \\ 0.03831418 & 0.05747126 & 0.21072797 & -0.08429119 \\ -0.01532567 & -0.02298851 & -0.08429119 & 0.23371648 \end{bmatrix}$$

$$\begin{bmatrix} -0.08045977 & 0.37931034 & 0.05747126 & -0.02298851 \\ 0.03831418 & 0.05747126 & 0.21072797 & -0.08429119 \\ -0.01532567 & -0.02298851 & -0.08429119 & 0.23371648 \end{bmatrix}$$

$$\begin{bmatrix} 0.03831418 & 0.05747126 & 0.21072797 & -0.08429119 \\ -0.01532567 & -0.02298851 & -0.08429119 & 0.23371648 \end{bmatrix}$$

$$\begin{bmatrix} -0.01532567 & -0.02298851 & -0.08429119 & 0.23371648 \end{bmatrix}$$

$$A^{-1} =$$

$$\begin{bmatrix} 0.27969349 & -0.08045977 & 0.03831418 & -0.01532567 \\ -0.08045977 & 0.37931034 & 0.05747126 & -0.02298851 \\ 0.03831418 & 0.05747126 & 0.21072797 & -0.08429119 \\ -0.01532567 & -0.02298851 & -0.08429119 & 0.23371648 \end{bmatrix}$$

$$\begin{bmatrix} -0.08045977 & 0.37931034 & 0.05747126 & -0.02298851 \\ 0.03831418 & 0.05747126 & 0.21072797 & -0.08429119 \\ -0.01532567 & -0.02298851 & -0.08429119 & 0.23371648 \end{bmatrix}$$

$$\begin{bmatrix} 0.03831418 & 0.05747126 & 0.21072797 & -0.08429119 \\ -0.01532567 & -0.02298851 & -0.08429119 & 0.23371648 \end{bmatrix}$$

$$\begin{bmatrix} -0.01532567 & -0.02298851 & -0.08429119 & 0.23371648 \end{bmatrix}$$

$$3. x \approx [1.338028, 2.014085, 1.704225, 0.901408]$$

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