1. Considere a matriz $\begin{bmatrix} 1 & 10 & -5 \\ 6 & 7 & 8 \end{bmatrix}$

2. Considere a matriz $\begin{pmatrix} 1 & 10 & -5 \\ 6 & 7 & 8 \\ 7 & 45 & 12 \end{pmatrix}$

3. Considere a matriz $M = \begin{vmatrix} 1 & 10 & -5 \\ 6 & 7 & 8 \\ 7 & 45 & 12 \end{vmatrix}$. Calcule o que for solicitado abaixo.

   (a) $\det M$

   (b) M^{-1}

   (c) M^T

1. Considere a matriz $m \times n$ dada por $\begin{bmatrix} a_{11} & a_{12} & a_{13} & \cdots & a_{1n} \\ a_{21} & a_{22} & a_{23} & \cdots & a_{1n} \\ a_{31} & a_{32} & a_{33} & \cdots & a_{1n} \\ \vdots & \vdots & \vdots & \ddots & \vdots \\ a_{m1} & a_{m2} & a_{m3} & \cdots & a_{mn} \end{bmatrix}$

2. Determine x, y e z na equação

$$\begin{bmatrix} 1 & -2 & 4 \\ 5 & 2 & -2 \\ 6 & 1 & 8 \end{bmatrix} \begin{bmatrix} x \\ y \\ z \end{bmatrix} = \begin{bmatrix} 2 \\ 10 \\ 6 \end{bmatrix}$$