

Calcule o determinante de cada uma das seguintes matrizes:

$$A = \begin{bmatrix} 1 & 2 \\ 3 & 4 \end{bmatrix}$$

$$B = \begin{bmatrix} 10 & 20 \\ 1 & 1 \end{bmatrix}$$

$$C = \begin{bmatrix} 4 & -2 \\ 7 & 1 \end{bmatrix}$$

$$D = \begin{bmatrix} 1 & 2 & 3 \\ 3 & 1 & 1 \\ 2 & 1 & 3 \end{bmatrix}$$

$$E = \begin{bmatrix} -1 & -2 & 1 \\ 4 & 3 & 1 \\ 2 & 1 & 3 \end{bmatrix}$$

$$F = \begin{bmatrix} 2 & 3 & 0 \\ 0 & 1 & 1 \\ 4 & 0 & 0 \end{bmatrix}$$

$$G = \begin{bmatrix} 0 & 1 & 2 \\ 1 & 0 & 0 \\ 3 & 2 & 1 \end{bmatrix}$$

$$H = \begin{bmatrix} 2 & 1 \\ 2 & 1 \end{bmatrix}$$

$$I = \begin{bmatrix} 0 & 3 & 2 \\ 4 & 1 & 5 \\ 0 & 3 & 2 \end{bmatrix}$$

$$J = \begin{bmatrix} 1 & 10 & 1 \\ 2 & 9 & 2 \\ 2 & 0 & 2 \end{bmatrix}$$

$$K = \begin{bmatrix} 1 & 0 & 0 \\ 0 & 1 & 0 \\ 0 & 0 & 1 \end{bmatrix}$$

$$L = \begin{bmatrix} 1 & 0 \\ 0 & 1 \end{bmatrix}$$

$$M = \begin{bmatrix} 3 & 3 & 0 \\ 10 & 10 & 1 \\ 4 & 4 & 5 \end{bmatrix}$$

$$N = \begin{bmatrix} 1 & 3 & 4 \\ 4 & 3 & 4 \\ 1 & 3 & 4 \end{bmatrix}$$