

PB12.1 Considere as matrizes

$$\mathbf{A} = \begin{bmatrix} 7 & 7 & 0 & 7 \\ 3 & 0 & 8 & 0 \\ 7 & 7 & 1 & 8 \\ 7 & 7 & 1 & 7 \end{bmatrix}, \quad \text{e} \quad \mathbf{B} = \begin{bmatrix} 1 & 1 & 1 & 8 \\ 1 & 2 & 1 & 1 \\ 1 & 1 & 2 & 1 \\ 1 & 1 & 1 & 5 \end{bmatrix}.$$

- a) Calcule $\det \mathbf{A}$.
- b) Calcule $\det \mathbf{B}$
- c) Calcule $\det \left(\frac{1}{3} \mathbf{A} \mathbf{B}^3 \right)$
- d) Calcule a entrada $(1, 2)$ de \mathbf{A}^{-1} .