

Problem 1

Evaluate the following determinants, using theorems about determinants to simplify your work as necessary.

(a)

$$\begin{vmatrix} 1 & 0 & 1 \\ 0 & 1 & 0 \\ 1 & 0 & 0 \end{vmatrix}$$

(b)

$$\begin{vmatrix} 1 & 2 & 0 \\ 3 & 1 & 2 \\ 0 & 3 & 1 \end{vmatrix}$$

(c)

$$\frac{1}{\sqrt{3}} \begin{vmatrix} 0 & \sqrt{3} & 0 & 0 \\ \sqrt{3} & 0 & 2 & 0 \\ 0 & 2 & 0 & \sqrt{3} \\ 0 & 0 & \sqrt{3} & 0 \end{vmatrix}$$

Problems from W&A Ch. 3:

W&A 3.1.3

W&A 3.1.4

W&A 3.2.2

W&A 3.2.9

W&A 3.2.10