

OPERATIILE ELEMENTARE CU MATRICI

Calculati (in caz ca
e posibil) urmatoarele
operatii: a) $A+B$ b) $B-C$

c) $C+A$ d) $A-C$

e) $2 \cdot A$ f) $A \cdot B$

g) $B \cdot A$ h) $A \cdot C$

i) $C \cdot A$ j) $B \cdot C$

k) $C \cdot B$ l) A^2

m) B^3 n) C^2

in fiecare din situatiile
urmatoare:

1) $A = \begin{pmatrix} 2 & 3 \\ 4 & 5 \end{pmatrix}$, $B = \begin{pmatrix} 1 & -2 \\ -3 & 4 \end{pmatrix}$, $C = \begin{pmatrix} 1 \\ 2 \end{pmatrix}$

2) $A = \begin{pmatrix} 4 & 5 \\ 6 & 7 \\ 1 & 3 \end{pmatrix}$, $B = \begin{pmatrix} 5 \\ 6 \\ 7 \end{pmatrix}$,

$$C = \begin{pmatrix} 2 & 3 & 4 \\ 1 & 3 & 2 \end{pmatrix}$$

3) $A = (4 \ 5 \ 6)$, $B = \begin{pmatrix} 1 \\ 2 \\ -3 \end{pmatrix}$

$$C = \begin{pmatrix} 2 & 3 & 4 \\ 5 & 1 & 2 \\ 0 & 2 & 1 \end{pmatrix}$$

4) $A = \begin{pmatrix} 2 & 0 & 0 \\ 0 & 1 & 0 \\ 0 & 2 & -1 \end{pmatrix}$, $B = \begin{pmatrix} 4 \\ 0 \\ 2 \end{pmatrix}$

$$C = \begin{pmatrix} 2 & 4 \\ 0 & 3 \\ 1 & 0 \end{pmatrix}$$

5) $A = \begin{pmatrix} 4 & 2 \\ 3 & 6 \end{pmatrix}$, $B = \begin{pmatrix} 3 & 1 \\ 4 & 5 \end{pmatrix}$,

$$C = \begin{pmatrix} 4 \\ -2 \end{pmatrix}$$