Multiplying by a scalar.

That is, multiplying a matrix by a number.

Example:

$$2\begin{bmatrix} 5 & 0 \\ 5 & 2 \end{bmatrix}$$

NB: The scalar (2) must multiply each of the matrix values

$$= \begin{bmatrix} (2\times5) & (2\times0) \\ (2\times5) & (2\times2) \end{bmatrix}$$

$$= \begin{bmatrix} 10 & 0 \\ 10 & 4 \end{bmatrix}$$

$$3\begin{bmatrix} 1 & 2 \\ 9 & 4 \end{bmatrix} = \begin{bmatrix} (3\times1) & (3\times2) \\ (3\times9) & (3\times4) \end{bmatrix}$$

$$= \begin{bmatrix} 3 & 6 \\ 27 & 12 \end{bmatrix}$$