

Matrices lesson 3 - Scalar multiplication, solving simple eqns

Magic Monk Tutorials

1 Evaluate the following given the following matrices:

$$A = \begin{pmatrix} 1 & 3 \\ 2 & 3 \\ 3 & 1 \end{pmatrix}, B = \begin{pmatrix} 4 & 2 \\ 5 & 1 \\ 3 & 0 \end{pmatrix}$$

1.1 4A

1.2 -2B

1.3 4A-2B

1.4 2A+2B

2 Evaluate the following given the following matrices:

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

2.1 2C-3D

3 Find a 2x2 matrix X such that $3X + A = B$ where $A = \begin{pmatrix} -1 & -2 \\ 2 & 3 \end{pmatrix}$ and $B = \begin{pmatrix} 2 & 4 \\ 5 & 3 \end{pmatrix}$.