

Algebra II, Quiz 16.1-16.2

For **1-4** evaluate the expressions using

$$\mathbf{A} = \begin{pmatrix} 1 & -1.1 \\ 0.9 & 0.1 \end{pmatrix}, \mathbf{B} = \begin{pmatrix} -4 & 1 \\ 0 & 3 \end{pmatrix}$$

1) $10\mathbf{A} + \mathbf{B}$

2) \mathbf{A}^2 (meaning multiply A by A)

3) $\mathbf{AB} + \mathbf{BA}$

4) \mathbf{ABA}

For **5-8**, give the dimensionality (rows, columns) of the expression $\mathbf{A(BC)}$, or write "Undefined" if the operation is undefined.

5) \mathbf{A} is 2×3 , \mathbf{B} is 2×4 and \mathbf{C} is 4×2

6) \mathbf{A} is 3×4 , \mathbf{B} is 4×2 and \mathbf{C} is 2×5

7) \mathbf{A} is 2×3 , \mathbf{B} is 3×2 and \mathbf{C} is 3×2

8) \mathbf{A} is 3×4 , \mathbf{B} is 2×4 and \mathbf{C} is 4×4