

**Math Quiz** – 1.4 Matrices

Name: \_\_\_\_\_

Directions: Multiply the matrix by the real number. Then solve.

1.  $4 \begin{bmatrix} 8 & -3 \\ 2 & 0 \end{bmatrix} - 9 \begin{bmatrix} 3 \\ 3 \end{bmatrix}$

2.  $4 \begin{bmatrix} 3 & -4 & -2 \\ -2 & 6 & -7 \end{bmatrix} - 2 \begin{bmatrix} 2 & -1 & 1 \\ -6 & -5 & 2 \end{bmatrix}$

3.  $\begin{bmatrix} 3 & -2 \\ -7 & 6 \end{bmatrix} + \begin{bmatrix} 7 & 4 \\ 2 & 1 \end{bmatrix}$

4.  $\begin{bmatrix} -1 & 2 \\ 4 & 0 \end{bmatrix} * \begin{bmatrix} 7 & -5 & 3 \\ 1 & 6 & 8 \end{bmatrix}$

Directions: Give the new dimensions of A\*B. If the multiplication is impossible, then write NO DIMENSION.

5.  $A^{2 \times 5} * B^{5 \times 6}$

6.  $A^{1 \times 10} * B^{10 \times 1}$

7.  $A^{4 \times 5} * B^{4 \times 5}$

8.  $A^{2 \times 14} * B^{14 \times 14}$