

**Precalculus Worksheet #4 Chapter 9 page 1** \_\_\_\_\_

**Given matrices A and B below. Perform the indicated operations.**

$$A = \begin{bmatrix} 1 & -1 \\ 4 & 3 \end{bmatrix} \quad B = \begin{bmatrix} 2 & -3 \\ -1 & 1 \end{bmatrix}$$

1.  $A + B =$

2.  $A - B =$

3.  $-2A =$

4.  $4B =$

5.  $2A + 3B =$

6.  $5A - 2B =$

7.  $AB =$

8.  $BA =$

**Given matrices C and D below. Find the indicated products.**

$$C = \begin{bmatrix} 4 & -1 & -2 \\ -3 & 2 & 5 \end{bmatrix} \quad D = \begin{bmatrix} -5 & 2 \\ 7 & 6 \\ 3 & 8 \end{bmatrix}$$

9.  $CD =$

10.  $DC =$

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Given matrix  $A$ , find  $A^{-1}$ . Show your work neatly organized.

11.  $A = \begin{bmatrix} 2 & 7 \\ 1 & 3 \end{bmatrix}$

12.  $A = \begin{bmatrix} 3 & -3 & 2 \\ 2 & -2 & 1 \\ -2 & 3 & 0 \end{bmatrix}$