Solve the following using Matrix Addition:

Name:

Period:

1. Find **A + B** if A = $\left[\begin{matrix}-2&0&1\\0&5&-8\end{matrix}\right]$ and B = $\left[\begin{matrix}-6&7&-1\\4&-3&10\end{matrix}\right]$

**A + B** = $\left[\begin{matrix}&&\\&&\end{matrix}\right]$

 (2 x 3)

1. Find **C – D** if C = $\left[\begin{matrix}9&4\\-1&3\\0&-4\end{matrix}\right]$ and D = $\left[\begin{matrix}8&-2\\-6&1\\5&-5\end{matrix}\right]$

**C – D** = $\left[\begin{matrix}&\\&\\&\end{matrix}\right]$

 (3 x 2)

1. Is matrix subtraction commutative? Test below and show all work necessary to justify:

**A – B: B – A:**

**A – B** = $\left[\begin{matrix}&&\\&&\end{matrix}\right]$ **B – A** = $\left[\begin{matrix}&&\\&&\end{matrix}\right]$

Circle one choice: YES NO

1. Can you solve the following equation? **A + B - C**

If yes show all work below; if no fully explain why not.

Circle one choice: YES NO

Justify here:

1. If **A** = $\left[\begin{matrix}-4&1&-1\\3&7&0\\-3&-1&8\end{matrix}\right]$; find: **3A**

**3A** = $\left[\begin{matrix}&&\\&&\\&&\end{matrix}\right]$

 (3 x 3)

1. Looking at the above problem 3A… Which is the Scalar value and which is the Vector value?

Scalar \_\_\_\_\_\_\_\_\_ Vector \_\_\_\_\_\_\_\_\_

1. Find the value for **M** if **M =** **2C + 3D – C** show all work below:

**M** = $\left[\begin{matrix}&&\\&&\end{matrix}\right]$