

Transition to College Math

Guided Practice

Unit 2 Lesson 1

Matrices

Name _____ Date _____ Period _____

Perform the indicated matrix operations, if possible. If the operation is not possible, explain why.

1. $\begin{bmatrix} 9 & 3 \\ 5 & 6 \end{bmatrix} + \begin{bmatrix} 8 & 9 \\ -3 & 3 \end{bmatrix}$

6. $\begin{bmatrix} 7 & 9 & 4 \\ -6 & 5 & 0 \\ 0 & 4 & 7 \end{bmatrix} - \begin{bmatrix} -7 & 7 & -8 \\ -6 & -6 & -5 \\ -3 & 7 & 3 \end{bmatrix}$

2. $\begin{bmatrix} -5 & -4 \\ 4 & 5 \end{bmatrix} - \begin{bmatrix} 5 & 10 \\ 1 & 1 \end{bmatrix}$

7. $-5 \begin{bmatrix} 7 & 9 & -6 \\ 7 & 2 & -8 \\ 8 & 0 & 8 \end{bmatrix} - (-8) \begin{bmatrix} -3 & -2 & 2 \\ 9 & 6 & 5 \\ -4 & 2 & 7 \end{bmatrix}$

3. $5 \begin{bmatrix} -6 & -8 \\ 8 & 8 \end{bmatrix}$

Let

$$\mathbf{A} = \begin{bmatrix} -1 & 1 \\ -6 & 0 \end{bmatrix}, \mathbf{B} = \begin{bmatrix} 0 & 3 \\ 9 & 6 \end{bmatrix}, \mathbf{C} = \begin{bmatrix} 7 \\ 7 \\ 2 \end{bmatrix}$$

Find the following,

4. $\begin{bmatrix} 6 & -3 \\ -4 & 8 \end{bmatrix} (-8)$

8. $2\mathbf{A} - 3\mathbf{C}$

5. $[-4 \ 0 \ 3] - \begin{bmatrix} 8 \\ -1 \\ -1 \end{bmatrix}$

9. $5\mathbf{B} - 6\mathbf{A}$

10. $\mathbf{A} + 3\mathbf{B}$