

Module: Data Analysis
Lesson: Matrices

Name _____
Date _____ **Pd.** _____

Add the following matrices.

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

2.
$$\begin{bmatrix} -1 & 0 \\ 2 & 1 \\ 4 & -3 \end{bmatrix} + \begin{bmatrix} 5 & -2 \\ -1 & 1 \\ -3 & 2 \end{bmatrix}$$

Subtract the following matrices.

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

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

Multiply the following matrices.

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

6.
$$\frac{1}{2} \begin{bmatrix} -1 & 0 \\ 2 & 1 \\ 4 & -3 \end{bmatrix}$$

Simplify the following expression.

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

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