Student Name: _____ **Score:**

Sheet 3

Multiplication of matrices

Find the product of the following matrices:

Let $A = \begin{bmatrix} 9 & 2 & -1 \\ 3 & 4 & 1 \\ 7 & 7 & -8 \end{bmatrix}$ and $B = \begin{bmatrix} 2 & 2 & 5 \\ -12 & 1 & 4 \\ 6 & 2 & 9 \end{bmatrix}$. Find AB.

Let $A = \begin{bmatrix} 1 & 6 & 5 \\ 4 & 2 & 1 \\ 8 & 2 & 5 \end{bmatrix}$ and $B = \begin{bmatrix} 1 & 1 & 2 \\ 8 & 4 & 1 \\ 3 & 3 & -2 \end{bmatrix}$. Find AB.

Let $A = \begin{bmatrix} 2 & 7 \\ -5 & 4 \end{bmatrix}$ and $B = \begin{bmatrix} 6 & 3 \\ 4 & -9 \end{bmatrix}$. Find AB.

Let $A = \begin{bmatrix} -1 & 3 & 5 \\ 8 & 2 & 3 \\ 6 & 4 & -2 \end{bmatrix}$ and $B = \begin{bmatrix} 3 & 4 & 5 \\ 6 & 2 & 1 \\ -8 & 5 & 2 \end{bmatrix}$. Find AB.

Student Name: _____ Score:

Answer key

Multiplication of matrices

Sheet 3

$$\begin{bmatrix} -12 & 18 & 44 \\ -36 & 12 & 40 \\ -118 & 5 & -9 \end{bmatrix}$$

$$\begin{bmatrix} 64 & 40 & -2 \\ 23 & 15 & 8 \\ 39 & 31 & 8 \end{bmatrix}$$

$$\begin{bmatrix} 40 & -57 \\ -14 & -51 \end{bmatrix}$$

$$\begin{bmatrix} -25 & 27 & 8 \\ 12 & 51 & 48 \\ 58 & 22 & 30 \end{bmatrix}$$