



Matrix Multiplication

Version 1

Name: _____

Date: _____

Score: _____

Direction: Simplify by multiplying the following matrices. Show all your work in the space provided.

$$1) \begin{bmatrix} 1 & -2 \\ 1 & 5 \end{bmatrix} \cdot \begin{bmatrix} -1 & 2 \\ 5 & -3 \end{bmatrix} =$$

$$2) \begin{bmatrix} 2 \\ -4 \end{bmatrix} \cdot \begin{bmatrix} -1 & 5 \end{bmatrix} =$$

$$3) \begin{bmatrix} 2 & -1 & 5 \\ 0 & 1 & -2 \end{bmatrix} \cdot \begin{bmatrix} -3 & 2 & 0 \\ 5 & 2 & 7 \\ 0 & 1 & -1 \end{bmatrix} =$$

$$4) \begin{bmatrix} 6 & 1 \\ -2 & 1 \\ -1 & 5 \end{bmatrix} \cdot \begin{bmatrix} 9 & -1 \\ 4 & -3 \end{bmatrix} =$$



Matrix Multiplication

Version 1

Name: _____

Date: _____

Score: _____

Direction: Simplify by multiplying the following matrices. Show all your work in the space provided.

$$1) \begin{bmatrix} 1 & -2 \\ 1 & 5 \end{bmatrix} \cdot \begin{bmatrix} -1 & 2 \\ 5 & -3 \end{bmatrix} = \begin{bmatrix} -11 & 8 \\ 24 & -13 \end{bmatrix}$$

$$2) \begin{bmatrix} 2 \\ -4 \end{bmatrix} \cdot \begin{bmatrix} -1 & 5 \end{bmatrix} = \begin{bmatrix} -2 & 10 \\ 4 & -20 \end{bmatrix}$$

$$3) \begin{bmatrix} 2 & -1 & 5 \\ 0 & 1 & -2 \end{bmatrix} \cdot \begin{bmatrix} -3 & 2 & 0 \\ 5 & 2 & 7 \\ 0 & 1 & -1 \end{bmatrix} = \begin{bmatrix} -11 & 7 & -12 \\ 5 & 0 & 9 \end{bmatrix}$$

$$4) \begin{bmatrix} 6 & 1 \\ -2 & 1 \\ -1 & 5 \end{bmatrix} \cdot \begin{bmatrix} 9 & -1 \\ 4 & -3 \end{bmatrix} = \begin{bmatrix} 58 & -9 \\ -14 & -1 \\ 11 & -14 \end{bmatrix}$$