Lesson 12.2 Practice: Matrix Multiplication

School Launch · Algebra II · Unit 12: Matrices and Vectors · Worksheet A

Calculator for decimals

Name _____ Date _____ Score _____ / 10

Show your work under each problem, one step per line, and check your answer. Word problems: name the unknown, write the equation, solve, and answer in a sentence with units.

1. Find AB for $A = \begin{bmatrix} 2 & 4 \\ 0 & 0 \end{bmatrix}$ and $B = \begin{bmatrix} 5 & 5 \\ 5 & -2 \end{bmatrix}$.

EASY

2. Find AB for $A = \begin{bmatrix} -4 & -3 \\ -2 & 4 \end{bmatrix}$ and $B = \begin{bmatrix} 3 & -2 \\ -5 & -3 \end{bmatrix}$. EASY

3. Find AB for $A = \begin{bmatrix} 2 & 3 \\ -4 & -4 \end{bmatrix}$ and $B = \begin{bmatrix} 4 & 0 \\ 5 & -1 \end{bmatrix}$. EASY

4. Find AB for $A = \begin{bmatrix} -5 & 5 \\ -5 & -2 \end{bmatrix}$ and $B = \begin{bmatrix} -1 & 1 \\ -4 & -4 \end{bmatrix}$. MEDIUM

5. Find AB for $A = \begin{bmatrix} 0 & 0 \\ 2 & 0 \end{bmatrix}$ and $B = \begin{bmatrix} -2 & 4 \\ -2 & 0 \end{bmatrix}$.

MEDIUM

6. Find AB for $A = \begin{bmatrix} 1 & 0 \\ -3 & -4 \end{bmatrix}$ and $B = \begin{bmatrix} -3 & 3 \\ 1 & 3 \end{bmatrix}$. MEDIUM

7. Find AB for $A = \begin{bmatrix} 5 & 3 \\ 1 & -3 \end{bmatrix}$ and $B = \begin{bmatrix} -3 & -4 \\ 4 & -5 \end{bmatrix}$. MEDIUM

8. Find AB for $A = \begin{bmatrix} 0 & 4 & 2 \\ 0 & -1 & 0 \end{bmatrix}$ and $B = \begin{bmatrix} 4 & 3 \\ 2 & -3 \\ 3 & -4 \end{bmatrix}$. HARD

9. Find AB for $A = \begin{bmatrix} 1 & -4 & -4 \\ 3 & 1 & 2 \end{bmatrix}$ and $B = \begin{bmatrix} -3 & 0 \\ 1 & -1 \\ -1 & 1 \end{bmatrix}$. HARD

10. Find AB for $A = \begin{bmatrix} -1 & -3 & 2 \\ 1 & -3 & 0 \end{bmatrix}$ and $B = \begin{bmatrix} 3 & -2 \\ 4 & -3 \\ -3 & -3 \end{bmatrix}$. HARD