Lesson 12.3 Practice: Determinants and Inverse Matrices

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 the determinant of $\begin{bmatrix} 4 & 1 \\ 5 & -6 \end{bmatrix}$. EASY

2. Find the determinant of $\begin{bmatrix} 6 & 6 \\ 5 & 0 \end{bmatrix}$. EASY

3. Find the determinant of $\begin{bmatrix} -5 & -1 \\ -2 & -4 \end{bmatrix}$. EASY

4. Find the inverse of $A = \begin{bmatrix} -1 & -3 \\ -6 & -1 \end{bmatrix}$. MEDIUM

5. Find the inverse of $A = \begin{bmatrix} 6 & -5 \\ -5 & 4 \end{bmatrix}$. MEDIUM

6. Find the inverse of $A = \begin{bmatrix} 3 & -6 \\ 2 & -3 \end{bmatrix}$. MEDIUM

7. Find the inverse of $A = \begin{bmatrix} 3 & -1 \\ -5 & 5 \end{bmatrix}$. MEDIUM

8. Find the inverse of $A = \begin{bmatrix} -6 & -5 \\ -3 & -5 \end{bmatrix}$. HARD

9. Find the inverse of $A = \begin{bmatrix} -1 & -2 \\ 6 & 5 \end{bmatrix}$. HARD

10. Find the inverse of $A = \begin{bmatrix} -4 & 6 \\ 4 & -1 \end{bmatrix}$. HARD