

ALGEBRA 2: MATRICES

Section	Key Problem	You Got It Right!	Notes	Correct on Homework.	I Got This!
A1: Basics	For matrix: $\begin{bmatrix} 2 & 4 & 6 & 8 \\ 1 & 3 & 5 & 9 \\ 8 & 3 & 7 & 0 \end{bmatrix}$, state the dimension and identify element a_{13} .			/12	
A2: Adding, Subtracting, Scalar Multiplication	Evaluate: $2 \cdot \begin{bmatrix} 3 & 4 & 1 \\ 1 & 2 & 0 \end{bmatrix} - \begin{bmatrix} 5 & 7 & 1 \\ 1 & 3 & -1 \end{bmatrix}$			/10	
A3: Matrix Multiplication	Multiply the following matrices: A. $\begin{bmatrix} 1 & 2 & 3 \end{bmatrix} \cdot \begin{bmatrix} 6 \\ 5 \\ 4 \end{bmatrix} =$ B. $\begin{bmatrix} 6 \\ 5 \\ 4 \end{bmatrix} \cdot \begin{bmatrix} 1 & 2 & 3 \end{bmatrix} =$			/7	
A123: More Practice	$A = \begin{bmatrix} 1 & 0 \\ 5 & 2 \end{bmatrix}, B = \begin{bmatrix} 2 \\ 3 \end{bmatrix}, C = \begin{bmatrix} 4 \\ 5 \end{bmatrix}$, find $A \cdot B - C$	X	X	/11	
A4: Transformations with Matrices	The vertices of a triangle are: (1,1), (2,2), (3,3). A. Write the coordinates as a matrix. The triangle is shifted up 1 and to the right 2. B. Write the coordinates of the TRANSFORMED matrix.			/6	
A5: Determinants	Find the determinant of the matrix: $\begin{vmatrix} 4 & -1 \\ 3 & 0 \end{vmatrix}$			/10	

<p>A6: Cramer's Rule</p>	<p>Use Cramer's Rule to solve each system of equations.</p> $\begin{aligned} x + 2y &= 7 \\ 4x - y &= 1 \end{aligned}$			/10	
<p>A7: Identity and Inverse Matrices</p>	<p>Find the inverse of the following matrix: $\begin{bmatrix} 3 & 1 \\ 2 & -1 \end{bmatrix}$</p>			/6	
<p>W</p>	<p>A. Write the system of equations in matrix form: $\begin{aligned} x + 2y &= 7 \\ 4x - y &= 1 \end{aligned}$</p> <p>B. Solve the system of equations using matrices.</p>			/10	
<p>Review</p>				/20	
<p>Test</p>					