Name:	
J#:	Dr. Clontz
Date:	

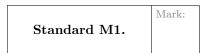**MASTERY QUIZ DAY 26**   Math 237 – Linear Algebra
Version 4   Fall 2017
Show all work. Answers without work will not receive credit. You may use a calculator, but you must show all relevant work to receive credit for a standard.

	Mark:
Standard M1.	

Let

$$A = \begin{bmatrix} 2 & 3 \\ 0 & 1 \end{bmatrix} \qquad\qquad B = \begin{bmatrix} 3 & 1 & 0 \end{bmatrix} \qquad\qquad C = \begin{bmatrix} 3 & -1 & 4 \\ 1 & 0 & 2 \end{bmatrix}$$

Exactly one of the six products AB, AC, BA, BC, CA, CB can be computed. Determine which one, and compute it.

	Mark:
Standard M2.	

Determine if the matrix $\begin{bmatrix} 3 & -1 & 0 & 4 \\ 2 & 1 & 1 & 1 \\ 0 & 1 & 1 & -1 \\ 1 & -2 & 0 & 3 \end{bmatrix}$ is invertible.

<table>
<tr><td rowspan="2">**Standard M3.**</td><td>Mark:</td></tr>
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Find the inverse of the matrix $\begin{bmatrix} 3 & 1 & 3 \\ 2 & -1 & -6 \\ 1 & 1 & 4 \end{bmatrix}$.

| **Additional Notes/Marks** | |