| Name: | |
|---|---|
| J#: | Dr. Clontz |
| Date: | |

**MASTERY QUIZ DAY 26** Math 237 – Linear Algebra
**Version 1** 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.

| **Standard M1.** | Mark: |
|---|---|

Let

$$A = \begin{bmatrix} 3 \\ 5 \\ -1 \end{bmatrix} \qquad B = \begin{bmatrix} 1 & -1 & 3 & -3 \\ 2 & 1 & -1 & 2 \end{bmatrix} \qquad C = \begin{bmatrix} 2 & -1 \\ 0 & 4 \\ 3 & 1 \end{bmatrix}$$

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

| **Standard M2.** | Mark: |
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Determine if the matrix $\begin{bmatrix} 3 & -1 & 0 \\ 2 & 1 & 1 \\ 0 & 1 & 1 \end{bmatrix}$ is invertible.

| **Standard M3.** | Mark: |
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Find the inverse of the matrix $\begin{bmatrix} 3 & -1 & 0 \\ 2 & 1 & 1 \\ 0 & 1 & 1 \end{bmatrix}$.

| **Additional Notes/Marks** | |
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