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

MASTERY QUIZ DAY 26

Math 237 – Linear Algebra Fall 2017

Version 5

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.



Let

$$C = \begin{bmatrix} 2 & 3 \\ 0 & 1 \end{bmatrix} \qquad \qquad D = \begin{bmatrix} 3 & 1 & 0 \end{bmatrix} \qquad \qquad E = \begin{bmatrix} 2 & 0 \\ 0 & -1 \\ 1 & -1 \end{bmatrix}$$

Determine which of the six products CD, CE, DC, DE, EC, ED can be computed, and compute them.

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

Standard M3.

Mark:

Find the inverse of the matrix $\begin{bmatrix} 6 & 0 & 1 \\ -14 & 3 & -4 \\ -23 & 4 & -6 \end{bmatrix}$.

Additional Notes/Marks