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# Math 240, ANSWERS TO MAKEUP FINAL EXAM

January 16, 2013

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(1) (e)

(2) (a)

(3) (a) is true, (b) is false, (c) is true, (d) is false

(4) **FTTFF**

(5) (f)

(6)

$$A = \begin{bmatrix} 1 & 1 & 0 \\ 2 & 1 & 1 \\ 3 & 0 & 1 \end{bmatrix} \cdot \begin{bmatrix} -1 & 0 & 0 \\ 0 & 2 & 0 \\ 0 & 0 & 2 \end{bmatrix} \cdot \begin{bmatrix} 1 & 0 & 0 \\ -1 & 1 & -1 \\ -3 & 0 & 1 \end{bmatrix} = \begin{bmatrix} 1 & 2 & -2 \\ -6 & 2 & 0 \\ -9 & 0 & 2 \end{bmatrix}$$

(7) (e)

(8) (a)

(9) (e)

(10) (c)