## QUIZ September 3, 2013

Clicker Instructions: A = True; B = False; C = I don't know; D = No truth value correct = 1pt; don't know = 0pt; wrong = -1pt

1. The following matrix is in reduced echelon form:

Γ1	-3	2	1]
$\begin{bmatrix} 1 \\ 0 \\ 0 \end{bmatrix}$	0	1	1 1 1
0	0	0	1

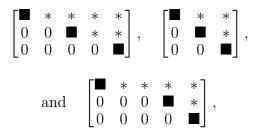
2. The pivot positions of a matrix are uniquely defined and for the matrix

Γ0	0	2 ]		Γ·	•	■7
1	2	$3 \mid$ ,	they are:		•	·   .
3	6	10	U U	Į.	•	• ]

3. If a consistent system has two free variables, e.g. x and y, then any one choice for both, e.g. (x, y) = (2, 3), determines a unique solution for the whole system.

- 4. Whenever a system has free variables, the solution set contains many solutions.
- 5. Back substitution on a matrix in echelon form is always a slower way to determine the solutions than continuing to find reduced echelon form.
- 6. The augmented matrices

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represent systems with no solution, one solution and infinitely many solutions, respectively.