QUIZ August 27, 2013

Clicker Instructions:
A = True; B = False; C = I don't know; D = No truth value;
E = I don't know how to work a clicker.
correct = 1pt; don't know = 0pt; wrong = -1pt

1. The following scenario is acceptable behaviour in this course: *You are doing homework for this class, to be handed in and graded. You work on a problem with your friend (who is also in the course) using only your textbook and your brain cells. You both contribute equally to the final answer that you've constructed together on the whiteboard in your room. You copy it down and hand it in.*
2. The following scenario is acceptable behaviour in this course: *You approach a tutor in the Math Resource Center and tell him you are having trouble with Problem 3.4. He demonstrates to you the first step of the problem. You understand his explanation, go back to your desk, and write down the first step. You figure it out from there, write it up and hand it in.*
3. The following is a linear combination of x and y:
$$3x + 4y = 1$$
4. The following two systems of linear equations are *equivalent*:
$$\begin{aligned} 2x + 0y &= 0 \\ 3x + 0y &= 1 \end{aligned}$$
and
$$\begin{aligned} 0x + 2y &= 0 \\ 0x + \ y &= 1 \end{aligned}$$
5. The *elementary row operations* are *replacement*, *interchange* and *scaling*. In particular, *scaling* refers to multiplying any row by any real number.
6. The terms *equivalent* and *row equivalent* mean the same thing.
7. This system
$$\begin{aligned} 2x + 4t &= 0 \\ 3x \quad &= 1 \end{aligned}$$
can be changed to this system
$$\begin{aligned} 9x + 12t &= 1 \\ 3x \quad &= 1 \end{aligned}$$
using one elementary row operation.
8. There may be more than one way to get from one linear system to another via elementary row operations.
9. Elementary row operations on an augmented matrix never change the solution set of the associated linear system.
10. The following augmented matrix represents a linear system that is consistent
$$\begin{bmatrix} 8 & 3 & 0 & 0 \\ 0 & 1 & 1 & 1 \\ 0 & 0 & 3 & 0 \end{bmatrix}$$
11. There exists a choice of a, b so that the system
$$\begin{aligned} ax + by &= 2 \\ cx + dy &= 0 \end{aligned}$$
is inconsistent for *all* c, d.