

Math 4A: "Quiz" 1
Week of April 10, 2017

Name: _____ Score: _____/10
Circle which section you attend: M 6pm M 7pm W 4pm W 7pm

Directions: No outside resources such as books, notes, or calculators are allowed.

Disclaimer: The content and level of difficulty of this quiz are not guaranteed to be in correlation with the midterm or final examinations in any form.

For the following problems, consider the system

$$\begin{aligned}x_1 + x_3 &= 2 \\x_2 + \alpha x_3 &= 0 \\x_1 + 2x_2 + 13x_3 &= 0\end{aligned}$$

1. For what values of α is the system
 - (a) inconsistent?
 - (b) consistent?

2. Is it possible to find a value of α such that the system has infinitely many solutions? Why or why not?

3. For $\alpha = 7$, find the solution of the system using Gauss-Jordan elimination.