Math 32 Quiz

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Name: _____ Score: _____ /10

You have thirty minutes to complete this quiz. You may not use calculators or notes, but the chalkboards are yours.

1. (4 pts) Use Gaussian elimination to find all solutions to the following system of equations:
$$\begin{cases} x + 4y - z = 0 \\ 3x + y - z = -1 \\ 4x - 4y + 5z = -7 \end{cases}$$

2. (3 pts) Find all solutions to the following system of two equations and three unknowns:

$$\begin{cases} x + 2y + 3z = 1 \\ 2x - y - z = 2 \end{cases}$$

3. (3 pts) There are four solutions to the following system of equations. Find them.

$$\begin{cases} x^2 + y^2 = 17 \\ xy = 4 \end{cases}$$