

Math 205
Quiz #4

1. For what values of a does the following system of equations have one solution, no solution, or infinitely many solutions:

$$\begin{aligned}4 &= x + 2y + 3z \\2 &= y + z \\a - 2 &= (a^2 - 4)z\end{aligned}$$

- If $a=2$ there are infinitely many solutions
- If $a=-2$ there are no solutions
- For all other values of a there is a single solution.