

Linear Algebra Foundations #8 - Systems of Equations

There are more than one integer values of a for which the following system of equations in x, y, z has **no solutions**:

$$a x + y + 2 z = 0$$

$$x + 2 y + z = b$$

$$2 x + y + a z = 0$$

What is the smallest integer value of a for which the above system has no solutions? Fill in the required integer value into the text box. Do not leave any leading or trailing spaces.