

1. Check whether the following system is singular or non-singular
 $u + v + w = 1, \quad 2u + 2v + 5w = 2, \quad 4u + 6v + 8w = 3.$
2. Test whether the system is singular/non-singular $u + v + w = 1, \quad 2u + 2v + 5w = 2, \quad 4u + 4v + 8w = 3.$ If this system is singular then discuss about its solution?
3. Solve system of equation $x + y - 2z = -3, \quad 2x + 5y + 3z = 11, \quad -x + 3y + z = 5.$ Check whether the system is singular or non-singular.
4. Test the system is singular or non-singular $y - 2z = 4, \quad x + 3y + 2z = 1, \quad -2x + 3y + z = 2.$
5. Is this system of equation is singular or non-singular
 $u + v + w = 0, \quad u + 2v + 3w = 0, \quad 3u + 5v + 7w = 1$