1. Solve $2x - y + z = 1, 4x - 2y + 2z = 2, 2x + 3x + y = -1$

2. Determine the values of a & b for which the system of equation $x + y + az = 2b, x + 3y + (2 + 2a)z = 7b, 3x + y + (3 + 3a)z = 11b$ will have(i) unique non trivial solution (ii) trivial solution (iii) no solution (iv) many solution.

3. Find the value of a for which elimination breaks down, temporarily or permanently, in $au + v = 1, 4u + av = 2$.

4. Test the consistency of the system $x + z = 1, x + y + z = 2, x - y + z = 1$. What if the right hand side is 1,2,0 ?

5. Check the consistency / Inconsistency of the system $x - 2y - 3z = 0, \ y + z = -8, -x + y + 2z = 3$