x1 − 2x2 + 2x3 = 2,

2x1 + 2x2 +x3 = 1,

x1 −4x2 + 3x3 = 1.

What is this system of equations in augmented form?

How would I use Gaussian elimination to reduce the system to upper triangular form doing the calculations by hand?

Could you please label the operations that you use?

Could you please state if the set of equations has no solution, if it has a unique solution, or if it has an infinite number of solutions?

If it has a unique solution could you show me how to find it?

If it has an infinite number of solutions could you show me how to find the general solution?