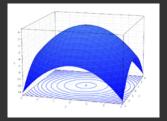# Tutorial 2b - Gaussian Elimination

COMP1046 - Maths for Computer Scientists

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Use Gaussian Elimination to solve this system of linear equations:

$$x_1 - x_2 = 1$$
$$2x_1 + x_2 = 8$$

Solve the following system of linear equations using the Gaussian Elimination Algorithm. Show your working using row vector notation.

$$2x_1 - x_2 + 3x_3 = 1$$
$$x_1 + x_2 - 2x_3 = 4$$
$$3x_1 - 2x_2 - x_3 = 7$$

From Lecture 5.

Use Gaussian Elimination to solve this system of linear equations:

$$-x_1 + 2x_2 - x_4 = 1$$
$$x_1 + x_2 + x_3 + 2x_4 = 2$$
$$2x_1 - 4x_2 + x_3 = -8$$
$$3x_1 + x_3 + 3x_4 = 1$$