Engineering Software Laboratory (ME69003)

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Problem Statement

Solve the given two simultaneous transcendental equations using the Multivariable Newton-Raphson method in Excel

$$y^2 + cos(2x) = 0$$

$$x^2 - 8y - sin(x) + 2 = 0$$

Initial guess for x is

$$x_0 = -1$$

Initial guess for y is

$$y_0 = 1$$