

Lab 9

1. Create a macro in MSExcel which implements the iteration:

$$x_n = \frac{9x_{n-1} - 20}{x_{n-1}}, n = 1, 2, \dots$$

for various values of the initial term x_0 . The macro should use an ActiveX button control to move from one term of the sequence to the next. Each term of the sequence should appear, in turn, in one fixed cell and the number of iterations used to date should appear in another fixed cell with suitable labelling in each case.

2. Create a macro in MSExcel which implements the Newton-Raphson iteration to solve the equation:

$$x^2 - 5x + 6 = 0$$

The macro should use an ActiveX button control to move from one term of the sequence to the next. Each term of the sequence should appear, in turn, in one fixed cell and the number of iterations used to date should appear in another fixed cell with suitable labelling in each case.