Department of Engineering Mathematics

EMAT20920: Numerical Methods in MATLAB

COURSEWORK ASSESSMENT

Jake Bowhay (UP19056)

All figures in this report have been saved using saveFigPDF function as it automatically resizes the paper to the correct size.

```
function saveFigPDF(fileName)
    % saveFigPDF saves open figure as a PDF file
    %
    % Inputs:
    % fileName = File name to save figure as
    % Usage:
    % saveFigPDF("polynomial") -> Saves current figure as polynomial.pdf

    % Get current figure handle
    figureHandle = gcf;
    % Resize paper
    set(figureHandle,'PaperPosition',3*[0 0 6 4]);
    set(figureHandle,'PaperSize',3*[6 4]);
    set(figureHandle,'PaperUnits','centimeters');

    print(fileName,'-dpdf');
end
```

Question 1: Root-finding