L19: class exercises – Try to implement/solve the following problems in MATLAB.

## Root finding

Use roots() or fzerogui to find a zero of each of the following functions in the given interval.

$$x^{3} - 2x - 5 \qquad [0, 3]$$

$$\sin(x) \qquad [1, 4]$$

$$x^{3} - 0.001 \qquad [-1, 1]$$

$$\log(x + 2/3) \qquad [0, 1]$$

$$sign(x - 2)\sqrt{|x - 2|} \qquad [1, 4]$$

$$\arctan(x) - \pi/3 \qquad [0, 5]$$

$$1/(x - \pi) \qquad [0, 5]$$