

**Submit a published pdf of your script and any other supporting code needed to solve the following problem to Canvas by Monday, September 7 at 11:59 p.m.**

Divide a Matlab script into sections using the command `%%`. Make one section per question and use a comment to label each section of the script (a)-(b). In each section, write a code that creates a plot of the following functions. Label the axes and title the plots appropriately. Publish the script and submit the resulting PDF to Canvas.

- (a)  $f_n(\theta) = \sin(n\theta\pi)$  over the interval  $\theta \in [0, 1]$  for  $n = 1, 2, 4$ . Plot all on the same graph with thick lines of different colors. Use a legend.
- (b)  $g(x) = (x + 2)(x - 1)(x - 4)$  over the interval  $x \in [-4, 5]$ . Plot a red line along the x-axis and plot blue crosses at the roots of  $g(x)$ .

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