1. Problem 1, page 145 of the text.

2. (a) Read Problem 2, page 145 of the text.
   (b) For the polynomial in part (c):
   \[ f(x) = x^4 + 4x^3 + x^2 - 6x + 2 \]
   find the four roots to three place accuracy, that is, isolate the four roots of \( f \) in intervals of length less than .001 whose centers are numbers of the form \( n/1000 \) where \( n \) is an integer. You will, no doubt, want to use a machine to help you with the calculations!!


4. Problem 4, page 145 of the text.

5. Problem 5, page 145 of the text.

6. (a) Find a fixed point of \( g(x) = (3x^2 - 4x + 2)/6 \) in \([0, 1]\).
   (b) Use the fact that \( \cos(x) \) is decreasing on \([0, \pi]\) to show that there is exactly one fixed point of \( h(x) = \cos(x) \) in \([0, 1]\) (recalling that \( x \) is measured in radians).
   (c) Find the fixed point of \( h(x) = \cos(x) \) in \([0, 1]\) to three place accuracy.