Hints for Homework 10

Note that Problems 5 and 6 are optional.

1. (Secant method; exercise from lecture) See the video tutorial on this topic from this week's supplementary materials page.

2. (Multidimensional Newton's method; **FNC** 4.5.5) See the video tutorial on this topic from this week's supplementary materials page.

3. (Polynomial vs. piecewise polynomial interpolation; **FNC** 5.1.2) See example codes in the live scripts accompanying Lecture 33.

4. (Piecewise cubic interpolation; **FNC** 5.1.3) Use either `interp1` (with `'spline'` option) or `spline`, both of which carry out the *not-a-knot* cubic spline. There are many other variations of piecewise cubic interpolation in MATLAB, but please stick with what was shown in class.