Expectation checklist - Module 3

At the completion of this module, you should:

- know the definitions introduced;
- Determine if a given function is a solution to an IVP;
- if given a first-order IVP determine if
  - there is a unique solution for the IVP, or
  - there is not enough information to conclude such a result;
- if given a first-order IVP be able to provide a region (both graphically and with mathematical notation) where you are guaranteed the existence of a unique solution for the IVP;
- find whether a multivariable function is continuous under the conventions in this class; and
- have an idea of what boundary value problems are.

You will be assessed on your understanding of these concepts:

- within the homework,
- on the quizzes, and
- later, on the exam.

Coming up next, we:

- begin a probe on *finding* solutions for first-order ODEs, and in particular methods surrounding
  - separable equations
  - first-order linear equations
  - exact equations
  - and first-order homogeneous equations.