Expectation checklist - Module 2

At the completion of this module, you should:

- know the definitions introduced,
- if given a function and DE be able to
  - determine if the function is a solution to the DE and
  - if so determine what the domain of the solution is,
- be able to determine if the solution set of a DE contains the trivial solution,
- implicitly differentiate a given relation,
- determine (via implicit differentiation) whether a given relation is an (implicit) solution for a given DE,
- check whether a given function is a particular solution for a DE,
- check whether a given family of functions is an n-parameter family of solutions for a DE, and
- be able to graph solutions, taking their domain into account.

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:

- introduce initial value problems,
- learn one way to determine whether solutions exist and are unique, and
- make a comment on boundary value problems.