Expectation checklist - Module 1

At the completion of this module, you should:

- know the definitions introduced,
- be able to determine what are dependent and independent variables in a (differential) equation,
- be able to compute basic partial derivatives of multivariable functions,
- determine whether a DE is an ODE or PDE and provide examples of each,
- determine whether a DE is linear or nonlinear and provide examples of each,
- determine the order of a DE and provide examples of DEs of any order,
- determine whether a given DE is written in normal, standard, or differential form, and
- be able to manipulate a given DE into normal, standard, or differential form if possible.

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:

- turn to developing terminology surrounding solutions to DEs,
- discuss the importance of studying the appropriate domains for which a function is a solution to a DE,
- determine whether a given function is a solution to a DE, and
- visualize solutions by graphing them.