Expectation checklist - Module 16 Ⓐↆ

At the completion of this module, you should:

- be able to compute the Laplace transform of a given function;
- be able to compute the inverse Laplace transform of a given function;
- know the Laplace transform and inverse Laplace transform for the functions given in the tables of this module;
- be able to use the tables and the linearity properties to compute the Laplace transform and inverse Laplace transform for many functions;
- apply partial fraction decomposition to decompose functions so that we can apply the inverse Laplace transform;
- compute the Laplace transform of derivatives of a function;
- apply the theory described here to solve IVPs;
- include "frequency shifting" into the theory describe above.

Coming up next, we:

- What if we need to solve for functions that satisfy more than one differential equation at a time? Well, that would be systems of differential equations, which is coming up next!