

Problems 1.4–6, 13. These two problems go together and are to be done as a single problem. Proceed as follows. First, use Euler's Method as in Problem 6 to obtain a plot of the solution. Then, on the same graph, use a higher-order method such as a Fourth-Order Runge-Kutta Method to obtain a more accurate plot. Finally, do the qualitative analysis mentioned in Problem 13. In particular, explain why the Euler solution is obviously wrong.

Problems 1.5–2, 9. Let's see what you do with these.