

1. Can the “standard form” for writing an ordinary differential equation include second derivative? Explain.
2. Why is an algorithm for solving ODEs called a “leapfrog” method?
3. What is the “rule of thumb” regarding the choice of an initial size for the step size h ?
4. Why is Euler’s rule usually considered too simple an algorithm for general use?
5. In words, what is the difference between rk2 and rk4?
6. Can the ODE solvers discussed in the lecture be used for both linear and non linear ODEs?
7. How many times must the function f be evaluated when using the rk4 method?