For all problems, do the following:

- **a.** Find approximate values of the solution of the given IVP at $t = 0.1$, 0.2, 0.3, 0.4 using the Euler method with $h = 0.1$.
- **b.** Repeat part **a** with $h = 0.05$.
- **c.** Compare **1** and **2** to the true solution $\phi(t)$.
- **d.** Find a formula for the local truncation error in terms of t and the solution ϕ for both values of h.

1. $y' = 2y - 1, \quad y(0) = 1$

2. $y' = 2 - t + 2y, \quad y(0) = 1$

3. $y' = 5 - 3\sqrt{y}, \quad y(0) = 2$