

Consider the DE  $y'(t) = -0.2(y(t) - 72)$

1. Suppose that  $y(0) = 180$ . Use Euler's method with a stepsize of 2 to approximate  $y(6)$ .
2. Verify that  $y(t) = 72 + 108e^{-0.2t}$  is a solution to the DE.
3. How accurate is your estimate from #1?  
How could you make it more accurate?