

1. Consider the solution of the initial value problem

$$\begin{aligned}y'(x) &= \sin(x^3) \\ y(0) &= 1.\end{aligned}\tag{1}$$

- a) Write the solution of this IVP down in terms of definite integrals.
- b) Use Octave to compute the value of  $y(1)$ . Use the quad function as described in class.
- c) Use Octave to graph the solution. Don't forget that the arrayfun function can be handy!