

Elementary Differential Equations: Evaluation #11, November 18, 2020

Name:_____

1. Let ϕ be the solution to the initial value problem

$$y'' + 2y' + (\cos x)y = 0, \quad y(0) = 1, \quad y'(0) = 0.$$

Compute $\phi''(0)$, $\phi'''(0)$, $\phi^{(4)}(0)$. Show your work.