(1) Approximate the value of $x_1(1)$ and $x_2(1)$ for the system $x'_1 = x_1 + 2x_2$, $x'_2 = 2x_1 + x_2$ if $x_1(0) = 0$ and $x_2(0) = 2$ using Euler’s method with 2 steps.

(2) Compare your answer above to the exact solution, and make a sketch of the system including your approximate trajectory.