Homework #2

due Thursday February 8

1. Tipler and Mosca Chapter 14 #84

2. Tipler and Mosca Chapter 14 #87

3. Verify that $x = Ae^{-\alpha t} \cos \omega t$ is a possible soultion to the equation

$$\frac{d^2x}{dt^2} + \gamma \frac{dx}{dt} + \omega_0^2 x = 0 \tag{1}$$

   and find α and ω in terms of γ and ω_0.

4. Tipler and Mosca Chapter 29 #35

5. Hirose and Lonngren Chapter 1 #10

6. Hirose and Lonngren Chapter 1 #11