11. Repeat Example 2.5 from T&M using a drag (retarding) force whose magnitude is $kmv^2$. In particular:

(a) Find $v(t)$. Is there a terminal velocity? What is it?

(b) Plot your $v(t)$ similar to Fig. 2.6 (with the same three initial conditions) and discuss the plot physically.

(c) Find and plot $x(t)$ for the same three initial conditions as in (b). Discuss the plot physically.