**Quiz 6b  Calculus 2  4/2/04**

Each problem is worth 5 points. For full credit provide proper justification for your answer.

1. Find a solution to the differential equation $\frac{dQ}{dt} = -0.3Q$ subject to the initial condition $Q(0) = 20$.

2. A jar of jelly is placed in a 68° F room. Write a differential equation for $H$, the temperature of the object at time $t$.