Math 204. Homework 3

Problems from W.E. Boyce, R.C. Diprima, D.B. Meade :

Section 2.8 p. 89, Problems: 2, 5, 7, 11, 14 .

Section 3.1 p. 107, Problems : 4, 5, 13, 15.

Problem A Show that if $w(t)$ is continuous, nonnegative on some interval [0,T]and satisifes the inequality

$$w(t) \leq \int_0^t w(s)ds \quad \forall t \in [0,T]$$

then $w(t) = 0, \quad \forall t \in [0,T]$.