

Problem of the Week-5: Solving An Integral Equation

Find a real valued function such that

$$f(x) = \frac{1}{2} - \int_0^x \cos(t) \cdot f^2(t) dt$$

As always, explain and justify your answer.

Posting Date 3/17/12. Submit solutions to Noah Aydin, Mathematics Department, RBH 319 (e-mail or hard-copy, but hard copy submissions must include a time stamp) by 4 pm on 3/30/12.