1014-45-998 **Rod Freed*** (raf12@cox.net), 25832 Empresa, Mission Viejo, CA 92691. *Solution of a Class of Integral Equations.* Preliminary report.

We use techniques from measure theory to provide solutions to a certain class of integral equations. Specifically, we show that with a simple transformation, the kernel, k(t, x), of the integral equation can be treated as if it is the conditional probability desity of t, given x. Then the left hand side of our integral equation con be treated as if it is the conditional expectation of the unknown function, f(t). Application of certain inequalities from probability theory and a little manipulation enables us to find f(t). (Received September 26, 2005)