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**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 density of  $t$ , given  $x$ . Then the left hand side of our integral equation can 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)