## A. J. Meir

## Math-5630/6630

Introduction to Numerical Analysis I Summer 2007

Quiz 2

1. Consider the following problem: find $x$ in some appropriate interval $[a, b]$ such that

$$
\mathrm{e}^{-x}-x=0
$$

a. What are reasonable values for $a$ and $b$ ?
b. Convert the above root finding problem to a fixed point problem in at least two ways (that is, find at least two distinct fixed point problems which are equivalent to the given root finding problem).

