$$f(x) = e^{2x}(x-1) \Rightarrow \frac{x+2}{2}$$

$$(x=1), f(x) = 6 = 0 \quad x = 1$$

$$g(x) = x + f(x) = x + e^{-2x}(x-1)$$

$$x_0 = 0.999$$

$$x_1 = g(x_0) = 0.99 + e^{-2x0.99}$$

$$x_1 = g(x_0) = 0.9886$$

$$x_2 = g(x_1) = 0.9870$$

$$x_2 = g(x_2) = -0.4338$$