

Exercise 5

In Exercises 5–8, show that the given function $u(x)$ is a solution of the corresponding Volterra integral equation:

$$u(x) = 1 + \frac{1}{2} \int_0^x u(t) dt, \quad u(x) = e^{2x}$$

[TYPO: The 1/2 should be a 2.]