$$ln[\circ]:= epsr = \{\epsilon \rightarrow 0.01\};$$

$$\frac{1}{e^{\frac{1}{2e}+\frac{\sqrt{1-4e}}{2e}}} \left(e^{\frac{1}{2}x \left(-\frac{1}{e}-\frac{\sqrt{1-4e}}{e}\right)} - e^{\frac{1}{2}x \left(-\frac{1}{e}+\frac{\sqrt{1-4e}}{e}\right)} \right) }{-1+e^{\frac{\sqrt{1-4e}}{e}}} /. \text{ epsr, } \{x, 0, 100\} \right]$$

Plot[Exp[1-x] - Exp[1-x/ ϵ] /. epsr, {x, 0, 100}]



