

Problem statement Suppose $F(x) = \int_0^x e^{(t^2)} dt$.

a) Compute $\lim_{x \rightarrow \infty} \frac{x F(x)}{e^{(x^2)}}$.

b) Compute $\lim_{x \rightarrow 0} \frac{F(x)}{x e^{(x^2)}}$.