Full name(s): ———————————————— .

Questions

1. Evaluate each of the following integrals via substitution.

   (a) $\int_0^2 x e^x dx$

   (b) $\int x^2 e^x dx$

   (c) $\int \sin(x) e^{-x} dx$

   (d) $\int x \ln(x) dx$

   (e) $\int_0^1 x\sqrt{x+1} dx$

   (f) $\int x^5 \sqrt{x^3+1} dx$