

Full name(s): \_\_\_\_\_ .

*Questions*

1. Compute the following integrals

1.  $\int_{\frac{1}{4}}^{\frac{3}{2}} \theta \cos(\theta^2) \sin(\theta^2) d\theta$

2.  $\int (x^4 + x^{-4}) \ln(x) dx$

3.  $\int_1^e \frac{\tan(\frac{\pi}{4} \ln(s))}{s} ds$

4.  $\int_0^1 e^{2t} \sin(\pi t/2) dt$