

To receive credit you **MUST SHOW ALL YOUR WORK**. Answers which are not supported by work will not be considered.

1. Compute each of the following (4 pts each):

(a) $\int \frac{e^x}{\sqrt{1-e^{2x}}} dx$

(b) $\int_0^{\pi/2} \sin^3 x \cos^2 x dx$

(c) $\int x^3 \ln x dx$