

Integration Gateway #1

Math 232

Same rules as the previous gateway, but here you must 3 of the 4 problems completely correct. Don't forget to circle your final answers!

1. $\int \frac{e^{\frac{1}{x}}}{x^2} dx$

2. $\int \sin^3 x \cos^2 x dx$

3. $\int \sin^{-1} x dx$ (Hint: Try integration by parts.)

4. $\int_1^2 \frac{1+x^2}{x^2} dx$