

Millersville University
Department of Mathematics
MATH 211, Calculus II
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Please evaluate the following definite and indefinite integrals.

1. $\int_1^e x^3 \ln x \, dx$

2. $\int \sin^{-1} x \, dx$

3. $\int 4x \sec^2 2x \, dx$

4. $\int p^4 e^{-p} \, dp$

5. $\int_0^{1/\sqrt{2}} 2x \sin^{-1}(x^2) \, dx$

6. $\int_0^1 x \sqrt{1-x} \, dx$

7. $\int_0^{\pi/3} x \tan^2 x \, dx$

8. $\int \sin(\ln x) \, dx$