

MATH 236 CALCULUS 2
INTEGRATION PROBLEMS 1

1. $\int \frac{1}{1 + \sin x} dx$

2. $\int \frac{e^x + e^{2x} + e^{3x}}{e^{4x}} dx$

3. $\int \frac{1}{a^2 + x^2} dx$ where $a > 0$.

4. $\int \frac{1}{\sqrt{a^2 - x^2}} dx$ where $a > 0$.

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

6. $\int e^x \sin(e^x) dx$

7. $\int \ln(\cos x) \tan x dx$

8. $\int \frac{\ln(\ln x)}{x \ln x} dx$

9. $\int \frac{e^{\sin^{-1} \sqrt{x}}}{2\sqrt{x - x^2}} dx$

10. $\int \sin^4 x \cos^3 x dx$