

PRACTICE PROBLEM SET 24

Evaluate the following integrals. The answers are in Chapter 21.

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

$$2. \int \frac{\cos x}{1 - \sin x} dx$$

$$3. \int \frac{1}{x \ln x} dx$$

$$4. \int_x \frac{1}{x} \cos(\ln x) dx$$

$$5. \int \frac{\sin x - \cos x}{\cos x} dx$$

$$6. \int \frac{dx}{\sqrt{x}(1+2\sqrt{x})}$$

$$7. \int \frac{e^x dx}{1+e^x}$$

$$8. \int x e^{5x^2-1} dx$$

$$9. \int e^x \cos(2+e^x) dx$$

$$10. \int \frac{e^x + e^{-x}}{e^x - e^{-x}} dx$$

$$11. \int x 4^{-x^2} dx$$

$$12. \int 7^{\sin x} \cos x dx$$