

Evaluate each of the following indefinite and definite integrals:

1. $\int (2 \sin x + 3 \cos x) dx$

2. $\int (\tan^2 x + 1) dx$

3. $\int \sec x (\tan x - \sec x) dx$

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

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

6. $\int_0^{\pi/4} \sec^2 x dx$

7. $\int_{\pi/2}^{3\pi/2} \csc x \cot x dx$

8. $\int_{\pi/4}^{7\pi/4} (\cot^2 x + 1) dx$

9. $\int_0^{\pi/3} \cos^2 x \sec x dx$

10. $\int \sec 2x \tan 2x dx$

11. $\int 2 \csc^2 3x dx$

12. $\int \sec^2 (2x + 2) dx$

13. $\int 4 \cos 2x dx$

14. $\int \csc (1 - x) \cot (1 - x) dx$

15. $\int_{1/3}^{4/3} \pi \sin \pi x dx$

16. $\int_{\pi/8}^{\pi/6} \cos 2x dx$

17. $\int_0^{\pi/3} \frac{1}{\cos^2 2x} dx$

18. $\int_0^{\pi/4} \sin 3x dx$

19. $\int \tan^2 x \sec^2 x dx$

20. $\int 6 \sin^2 2x \cos 2x dx$

21. $\int 4 \csc^3 2x \cot 2x dx$

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

23. $\int 4 \cot x \csc^2 x dx$

24. $\int \sqrt{\cos x} \sin x dx$

25. $\int \frac{\sin x}{\cos^3 x} dx$

26. $\int \frac{\csc^2 x}{\cot^3 x} dx$

27. $\int_{\pi/4}^{3\pi/4} \frac{\cos x}{1 - \cos^2 x} dx$

28. $\int_{\pi/6}^{\pi/3} (1 - \cos 3x) \sin 3x dx$

29. $\int_0^{\pi/2} \frac{\cos x}{(\sin x + 1)^2} dx$

30. $\int_0^{\pi/2} 15 \sin^4 3x \cos 3x dx$

31. $\int_0^{\pi/2} \cos^3 2x \sin 2x dx$

32. $\int_{-\pi/4}^0 \tan x \sec^2 x dx$

33. $\int_{-\pi/2}^{\pi/2} \sin^2 x \cos x dx$