

1. Evaluate the integral: $\int \sin^3(3x) \cos^3(3x) dx$

2. Evaluate the integral: $\int \sin^4 x \cos^2 x dx$

3. Evaluate the integral: $\int \frac{\cos^2(\ln x)}{x} dx$

4. Evaluate the integral: $\int \tan^4 x \sec^4 x dx$

5. Evaluate the integral: $\int \tan^3 x \sec^3 x dx$

6. Evaluate the integral: $\int \tan^2 x \sec^3 x dx$

7. Evaluate the integral: $\int \cos(7x) \sin(3x) dx$

8. Evaluate the integral: $\int \frac{1}{\sin x + 1} dx$