

1. Calculate $\int \cos^5 x \sin^8 x \, dx$
2. Calculate $\int \sin^2 x \cos^2 x \, dx$
3. Calculate $\int \frac{1}{\cos x - 1} \, dx$
4. Calculate $\int \frac{1}{\sqrt{9x^2 + 6x - 8}} \, dx$
5. Calculate $\int_0^1 \sqrt{x^2 + 1} \, dx$
6. Calculate $\int \sqrt{1 - 4x^2} \, dx$
7. Calculate $\int \frac{\sqrt{x^2 - 4}}{x} \, dx$
8. Calculate $\int_0^1 \frac{x-4}{x^2 - 5x + 6} \, dx$
9. Calculate $\int \frac{x^5 + x - 1}{x^3 + 1} \, dx$
10. Calculate $\int_9^{16} \frac{\sqrt{x}}{x-4} \, dx$