

1. Evaluate $\int_{\pi/2}^{3\pi/4} (\sin(x))^5 (\cos(x))^3 dx$.

2. Evaluate $\int (\tan(y))^3 \sec(y) dy$.

3. Evaluate $\int_0^{2\pi} (\cos(6\theta))^2 d\theta$.

4. Evaluate $\int \sec(x) dx$.

5. Evaluate $\int (\sec(x))^3 dx$.

6. Evaluate $\int \tan(x) dx$.

7. Evaluate $\int (\tan(x))^3 dx$.

8. Evaluate $\int (\cot(x))^5 \csc(x) dx$.