

Worksheet--Trigonometric Integrals

1. Evaluate: $\int \cos^3 x \sin^2 x dx$ $\frac{1}{3} \sin^3 x - \frac{1}{5} \sin^5 x + C$
2. Evaluate: $\int \sin^5 x \cos^2 x dx$ $-\frac{1}{3} \cos^3 x + \frac{2}{5} \cos^5 x - \frac{1}{7} \cos^7 x + C$
3. Evaluate: $\int \cos^2 3x dx$ $\frac{1}{2} x + \frac{1}{12} \sin 6x + C$
4. Evaluate: $\int \sec^4 5x dx$ $\frac{1}{15} \tan^3 5x + \frac{1}{5} \tan 5x + C$
5. Evaluate: $\int \sec^3 x \tan x dx$ $\frac{1}{3} \sec^3 x + C$