

Math 232 Worksheet - Trigonometric Integrals

Evaluate the trigonometric integral.

$$(1) \int \sin^n x \, dx \text{ (where } n = 2, 3, 4, 5) \quad (2) \int \cot^n x \, dx \text{ (where } n = 1, 2, 3) \quad (3) \int \tan^5 x \, dx$$

$$(4) \int \sec^n x \, dx \text{ (where } n = 5, 6) \quad (5) \int \cos^n x \sin^2 x \, dx \text{ (where } n = 2, 3)$$

$$(6) \int \sec^n x \tan^3 x \, dx \text{ (where } n = 2, 3)$$