

# How to Integrate Powers of Trig Functions

Name \_\_\_\_\_

Evaluate the integral.

1.  $\int \sin^2 2\theta d\theta$

2.  $\int \cos^2 3\theta d\theta$

3.  $\int \sin^7 \theta d\theta$

4.  $\int \cos^5 \theta \sin^2 \theta d\theta$

5.  $\int \cos^3 \theta \sin^3 \theta d\theta$

6.  $\int \sin^4 x dx$

7.  $\int \sec^6(2\theta) d\theta$

8.  $\int \tan^3 \theta d\theta$

9.  $\int \sec(3\theta) d\theta$

10.  $\int \tan^4 \theta \sec^4 \theta d\theta$

11.  $\int \tan \theta \sec^3 \theta d\theta$

12.  $\int \sec^4 \theta \tan^5 \theta d\theta$

13.  $\int \cos^4 \theta \sin^4 \theta d\theta$

14.  $\int \cot^3 \theta \csc^4 \theta d\theta$

15.  $\int \frac{\sin^3 \theta}{\cos^5 \theta} d\theta$