

Integrals

Moderate

Trig Power Multiplication

1. $\int \sec^4(x) \tan^4(x) dx$

2. $\int \tan^3(x) \sec^4(x) dx$

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

4. $\int \tan^2(x) \sec^4(x) dx$

5. $\int \tan^4(x) \sec^6(x) dx$

6. $\int \tan^6(x) \sec^4(x) dx$

7. $\int \sec^4(\theta) \tan^2(\theta) d\theta$

8. $\int \sec^3(\theta) \tan^3(\theta) d\theta$

9. $\int \sec^5(x) \tan^5(x) dx$

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

Answers**Integrals****Moderate****Trig Power Multiplication**

$$1. \frac{\tan^5(x)}{5} + \frac{\tan^7(x)}{7} + C$$

$$2. \frac{\tan^4(x)}{4} + \frac{\tan^6(x)}{6} + C$$

$$3. \frac{\sec^7(x)}{7} - \frac{\sec^5(x)}{5} + C$$

$$4. \frac{\tan^3(x)}{3} + \frac{\tan^5(x)}{5} + C$$

$$5. \frac{\tan^5(x)}{5} + \frac{2\tan^7(x)}{7} + \frac{\tan^9(x)}{9} + C$$

$$6. \frac{\tan^7(x)}{7} + \frac{\tan^9(x)}{9} + C$$

$$7. \frac{\tan^3(\theta)}{3} + \frac{\tan^5(\theta)}{5} + C$$

$$8. \frac{\sec^5(\theta)}{5} - \frac{\sec^3(\theta)}{3} + C$$

$$9. \frac{\sec^9(x)}{9} - \frac{2\sec^7(x)}{7} + \frac{\sec^5(x)}{5} + C$$

$$10. \frac{\sec^7(x)}{7} - \frac{\sec^5(x)}{5} + C$$