

§7.2 Trigonometric Integrals

In-class Activity 7.2



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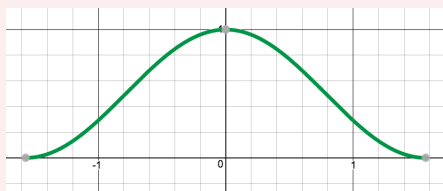
Activity 1: Case: at least one ODD

Evaluate:

(a) $\int \sin^3(x) dx$

(b) $\int \sin^4(x) \cos^5(x) dx$

Activity 2: Case: EVEN

(a) Find the area under the curve $y = \cos^2(x)$ where $-\frac{\pi}{2} \leq x \leq \frac{\pi}{2}$.(b) Find: $\int \cos^4(x) dx$

Activity 3:

Evaluate:

(a) Find: $\int \tan^3(x) \sec^5(x) dx$

(b) Find: $\int \tan^2(x) \sec^4(x) dx$

Activity 4:

Use IBP to evaluate: $\int \sec^3(x) dx$

Activity 5:

Find: $\int \sin(4x) \cos(3x) dx$