MAC2312: Calculus 2 - Section 3

Quiz 2: 7.2 Trigonometric Integrals

May 14, 2015

1. Evaluate
$$\int \sin^2(\pi x) \cos^5(\pi x) dx$$
.

A.
$$\frac{1}{3\pi}\sin^3(\pi x) - \frac{1}{5\pi}\sin^5(\pi x) + C$$

B.
$$\frac{1}{5\pi}\sin^5(\pi x) - \frac{1}{3\pi}\sin^3(\pi x) + C$$

C.
$$\frac{1}{\pi}\sin(\pi x) - \frac{2}{3\pi}\sin^3(\pi x) + \frac{1}{5\pi}\sin^5(\pi x) + C$$

D. $\frac{1}{3\pi}\sin^3(\pi x) - \frac{2}{5\pi}\sin^5(\pi x) + \frac{1}{7\pi}\sin^7(\pi x) + C$

D.
$$\frac{1}{3\pi}\sin^3(\pi x) - \frac{2}{5\pi}\sin^5(\pi x) + \frac{1}{7\pi}\sin^7(\pi x) + C$$