

MAC2312: Calculus 2 - Section 3

Quiz 3: 7.3 Trigonometric Substitution

May 19, 2015

1. Evaluate $\int \frac{x^3}{\sqrt{x^2 + 4}} dx$.

A. $\frac{1}{6}(x^2 + 4)^{3/2} - 2\sqrt{x^2 + 4} + C$

B. $2\sqrt{x^2 + 4} - \frac{1}{6}(x^2 + 4)^{3/2} + C$

C. $\frac{1}{3}(x^2 + 4)^{3/2} - 4\sqrt{x^2 + 4} + C$

D. $4\sqrt{x^2 + 4} - \frac{1}{3}(x^2 + 4)^{3/2} + C$