

Lesson 7-3 Trigonometric Techniques of Integration

1- Evaluate $\int \cos x \sin^4 x \, dx$

Choose 1 answer

A- $= -\frac{1}{5} \sin^5 x + c$

B- $= \frac{1}{5} \sin^5 x + c$

C- $= \frac{1}{5} \cos^5 x + c$

D- $= -\frac{1}{5} \cos^5 x + c$

2- Evaluate $\int \cos^3 x \sin^4 x \, dx$

Choose 1 answer

A- $= -\frac{1}{7} \sin^7 x + \frac{1}{5} \sin^5 x + c$

B- $= \frac{1}{7} \sin^7 x - \frac{1}{5} \sin^5 x + c$

C- $= -\frac{1}{7} \cos^7 x - \frac{1}{5} \sin^5 x + c$

D- $= \frac{1}{7} \sin^7 x + \frac{1}{5} \cos^5 x + c$

3- Evaluate $\int_0^{\frac{\pi}{4}} \cos 2x \sin^3 2x \, dx$

Choose 1 answer

A- 0.4

B- 0.375

C- 0.125

D- 0.5

4- Evaluate $\int_0^{\frac{\pi}{2}} \sin x \cos^2 x \, dx$

Choose 1 answer

A- 1

B- 0.5

C- 0.667

D- 0.333