

Name: _____

3. Find $\int 3t^5(t^3 + 3)^2 dt$.

A. $\frac{1}{4}t^4 - 4t^3 + C$

B. $\frac{1}{4}(t^3 + 3)^4 - (t^3 + 3)^3 + C$

C. $\frac{1}{2}(t^3 + 3)^2 + 4(t^3 + 3)^3 + C$

D. None of these.

4. Evaluate $\int_0^1 x^2 e^{2x^3} dx$.

A. $\frac{1}{6}e^2 - \frac{1}{6}$

B. $\frac{1}{4}e^2 - \frac{1}{4}e$

C. $\frac{1}{3}e - \frac{1}{3}$

D. None of these.