

AP Calculus AB
Integration
Basic / Trig / chain

1. $\int 3x^2 \sqrt{x^3 - 7} \, dx$

2. $\int 3 \csc(x) \, dx$

3. $\int \frac{1 - \sin^2(2x)}{\sin(2x) \cos(2x)} \, dx$

4. $\int 4x \tan(5x^2) \, dx$

5. $\int \frac{3x^2}{\sqrt[3]{2x^3 + 11}} \, dx$

6. $\int \csc^2(x) \cot^2(x) \, dx$

7. $\int (21x - 28)(3x^2 - 8x)^4 \, dx$

8. $\int \frac{4 \sin(3x)}{\cos^2(3x)} \, dx$

9. $\int 5x^2 \sqrt{2x^3 - 1} \, dx$

10. $\int 2x \sin^3(3x^2) \cos(3x^2) \, dx$

11. $\int \frac{\sin(2x) \tan^2(2x) + \sin(2x)}{\frac{1}{\csc(2x)}} \, dx$

12. $\int \frac{2x \sec^3(4x^2) \sin(4x^2)}{5 \cos(4x^2)} \, dx$

13. $\int 3x e^{4x^2 - 5} \, dx$

14. $\int \frac{e^{\tan(2x)}}{\cos^2(2x)} \, dx$

15. $\int 4x^2 \cdot 3^{5x^3 + 2} \, dx$

16. $\int \frac{x^3 e^{3x^4} \cdot 5^{e^{3x^4}}}{6} \, dx$