

7.1-7.5 Practice Problems

1) Evaluate $\int \cos(5x) + e^{2x} + \tan(2x) dx$

2) Evaluate $\int \frac{x^{3/2} + x}{x^{5/2}} + \sin(4x) dx$

3) Evaluate $\int \frac{e^x}{e^x + 2} dx$

4) Evaluate $\int \frac{(2 + \sqrt{x})^4}{\sqrt{x}} dx$

5) Evaluate $\int x^2 (\ln(x))^2 dx$

6) Evaluate $\int x^2 e^x dx$

7) Evaluate $\int \sin^4 x \cos^3 x dx$

8) Evaluate $\int \cos^4(x) dx$

9) Evaluate $\int \tan^4 x \sec^6 x dx$

10) Evaluate $\int \tan^3 x \sec^3 x dx$

11) Evaluate $\int \sinh^3 x \cosh^5 x dx$

12) Evaluate $\int \tanh^4 x \operatorname{sech}^3 x dx$

13) Evaluate $\int \frac{1}{\sqrt{9+x^2}} dx$

14) Evaluate $\int \frac{\sqrt{x^2-4}}{x^4} dx$

15) Evaluate $\int \frac{2x}{(x+3)(3x+1)} dx$

16) Evaluate $\int \frac{x^3}{x^2+4x+3} dx$