

Integration By Parts:

1. $\int x \sin x dx$

2. $\int x^2 e^{2x} dx$

3. $\int x^4 \ln x dx$

4. $\int \sqrt{x} \ln(2x) dx$

5. $\int x \sqrt{3-x} dx$

6. $\int x^2 \sqrt{x+5} dx$

7. $\int \frac{x}{\sqrt{2+x}} dx$

8. $\int \frac{x^2}{\sqrt{2+x}} dx$

9. $\int \frac{x}{\sqrt{2+x^2}} dx$

10. $\int (x-1)^2 \ln x dx$

11. $\int e^x \cos x dx$

12. $\int \cos(\ln x) dx$

13. $\int e^{2x} \cos(3x) dx$

14. $\int \frac{x^3}{\sqrt{5+3x^2}} dx$

15. $\int \ln(x^2+4) dx$

16. $\int x e^x dx$

17. $\int x \sin(4x) dx$

18. $\int x^2 \sin(2x) dx$

19. $\int \sin(3x) \cos(5x) dx$

20. $\int \cos x \ln(\sin x) dx$

21. $\int (2x+3)e^x dx$

22. $\int x 5^x dx$

23. $\int x^5 e^{x^2} dx$

24. $\int (\ln x)^2 dx$

25. $\int x^3 \ln x dx$

26. $\int x^3 \sqrt{9-x^2} dx$

27. $\int x(1+x)^{10} dx$

28. $\int \frac{3x}{e^x} dx$

29. $\int x(x+5)^{-3} dx$

30. $\int \sqrt{x} \ln \sqrt{x} dx$

31. $\int x^{-3} \ln x dx$

32. $\int x^5 \sin(x^3) dx$