

## SIK KULLANILAN BAZI İNTEGRALLER İÇİN TABLO

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| <p>1. <math>\int u^n du = \frac{u^{n+1}}{n+1} + c, \quad n \neq -1</math></p> <p>2. <math>\int \frac{1}{u} du = \ln u  + c</math></p> <p>3. <math>\int e^u du = e^u + c</math></p> <p>4. <math>\int a^u du = \frac{1}{\ln a} a^u + c</math></p> <p>5. <math>\int \sin u du = -\cos u + c</math></p> <p>6. <math>\int \cos u du = \sin u + c</math></p> <p>7. <math>\int \sec^2 u du = \tan u + c</math></p> <p>8. <math>\int \csc^2 u du = -\cot u + c</math></p> <p>9. <math>\int \sec u \tan u du = \sec u + c</math></p> <p>10. <math>\int \csc u \cot u du = -\csc u + c</math></p> <p>11. <math>\int \tan u du = -\ln \cos u  + c</math></p> <p>12. <math>\int \cot u du = \ln \sin u  + c</math></p> <p>13. <math>\int \sec u du = \ln \sec u + \tan u  + c</math></p> <p>14. <math>\int \csc u du = \ln \csc u - \cot u  + c</math></p> <p>15. <math>\int u \sin u du = \sin u - u \cos u + c</math></p> <p>16. <math>\int u \cos u du = \cos u + u \sin u + c</math></p> <p>17. <math>\int \sin^2 u du = \frac{1}{2}u - \frac{1}{4}\sin 2u + c</math></p> <p>18. <math>\int \cos^2 u du = \frac{1}{2}u + \frac{1}{4}\sin 2u + c</math></p> <p>19. <math>\int \tan^2 u du = \tan u - u + c</math></p> <p>20. <math>\int \cot^2 u du = -\cot u - u + c</math></p> <p>21. <math>\int \sin^3 u du = -\frac{1}{3}(2 + \sin^2 u)\cos u + c</math></p> <p>22. <math>\int \cos^3 u du = \frac{1}{3}(2 + \cos^2 u)\sin u + c</math></p> | <p>23. <math>\int \tan^3 u du = \frac{1}{2}\tan^2 u + \ln \cos u  + c</math></p> <p>24. <math>\int \cot^3 u du = -\frac{1}{2}\cot^2 u - \ln \sin u  + c</math></p> <p>25. <math>\int \sec^3 u du = \frac{1}{2}\sec u \tan u + \frac{1}{2}\ln \sec u + \tan u  + c</math></p> <p>26. <math>\int \csc^3 u du = -\frac{1}{2}\csc u \cot u + \frac{1}{2}\ln \csc u - \cot u  + c</math></p> <p>27. <math>\int \sin au \cos bu du = \frac{\sin(a-b)u}{2(a-b)} - \frac{\sin(a+b)u}{2(a+b)} + c</math></p> <p>28. <math>\int \cos au \cos bu du = \frac{\sin(a-b)u}{2(a-b)} + \frac{\sin(a+b)u}{2(a+b)} + c</math></p> <p>29. <math>\int e^{au} \sin bu du = \frac{e^{au}}{a^2 + b^2}(a \sin bu - b \cos bu) + c</math></p> <p>30. <math>\int e^{au} \cos bu du = \frac{e^{au}}{a^2 + b^2}(a \cos bu + b \sin bu) + c</math></p> <p>31. <math>\int \sinh u du = \cosh u + c</math></p> <p>32. <math>\int \cosh u du = \sinh u + c</math></p> <p>33. <math>\int \operatorname{sech}^2 u du = \tanh u + c</math></p> <p>34. <math>\int \operatorname{csch}^2 u du = -\operatorname{coth} u + c</math></p> <p>35. <math>\int \tanh u du = \ln(\cosh u) + c</math></p> <p>36. <math>\int \operatorname{coth} u du = \ln \sinh u  + c</math></p> <p>37. <math>\int \ln u du = u \ln u - u + c</math></p> <p>38. <math>\int u \ln u du = \frac{1}{2}u^2 \ln u - \frac{1}{4}u^2 + c</math></p> <p>39. <math>\int \frac{1}{\sqrt{a^2 - u^2}} du = \sin^{-1} \frac{u}{a} + c</math></p> <p>40. <math>\int \frac{1}{\sqrt{a^2 + u^2}} du = \ln\left u + \sqrt{a^2 + u^2}\right  + c</math></p> <p>41. <math>\int \sqrt{a^2 - u^2} du = \frac{u}{2}\sqrt{a^2 - u^2} + \frac{a^2}{2}\sin^{-1} \frac{u}{a} + c</math></p> <p>42. <math>\int \sqrt{a^2 + u^2} du = \frac{u}{2}\sqrt{a^2 + u^2} + \frac{a^2}{2}\ln\left u + \sqrt{a^2 + u^2}\right  + c</math></p> <p>43. <math>\int \frac{1}{a^2 + u^2} du = \frac{1}{a}\tan^{-1} \frac{u}{a} + c</math></p> <p>44. <math>\int \frac{1}{a^2 - u^2} du = \frac{1}{2a}\ln\left \frac{a+u}{a-u}\right  + c</math></p> |
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