

İntegral Tablosu

$u = u(x)$ ise

1. $\int du = u + c$
2. $\int a \cdot du = a \int du = a \cdot u + c$
3. $\int (du + dv + \dots) = \int du + \int dv + \dots = u + v + \dots$
4. $\int \frac{du}{u} = \ln u + c$
5. $\int u^n du = \frac{u^{n+1}}{n+1} + c$
6. $\int e^u du = e^u + c$
7. $\int a^u du = \frac{a^u}{\ln a} + c$
8. $\int \frac{du}{u^2 - a^2} = \frac{1}{2a} \ln \left(\frac{u-a}{u+a} \right) + c$
9. $\int \frac{du}{u^2 + a^2} = \frac{1}{a} \arctan \left(\frac{u}{a} \right) + c$
10. $\int \frac{du}{\sqrt{u^2 + a^2}} = \ln(u + \sqrt{u^2 + a^2}) + c$
11. $\int \frac{du}{\sqrt{u^2 - a^2}} = \ln(u + \sqrt{u^2 - a^2}) + c$
12. $\int \frac{du}{\sqrt{a^2 + u^2}} = \arcsin \left(\frac{u}{a} \right) + c$
13. $\int \ln(x) dx = x \ln x - x + c$
14. $\int \log_b(x) dx = x \log_b(x) - x \log_b(e) + c$
15. $\int \cos(u) du = \sin(u) + c$
16. $\int \sin(u) du = -\cos(u) + c$
17. $\int \sec^2(u) du = \tan(u) + c$
18. $\int \operatorname{cosec}^2(u) du = -\cotan(u) + c$
19. $\int \sec(u) \cdot \tan(u) du = \sec(u) + c$
20. $\int \operatorname{cosec}(u) \cdot \cotan(u) du = -\operatorname{cosec}(u) + c$
21. $\int \tan(u) du = -\ln(\cos(u)) + c = \ln \sec(u) + c$
22. $\int \cotan(u) du = \ln(\sin(u)) + c$
23. $\int \sec(u) du = \ln(\sec(u) + \tan(u)) + c$
24. $\int \operatorname{cosec}(u) du = \ln(\operatorname{cosec}(u) - \cotan(u)) + c$

————— Trigonometrik Fonk.