

Baza 1-kurs Amaliy matematika (uzb)

1. Aniqmas integral va uni topishning sodda usullar
2. Ratsional funksiyalarni integrallash.
3. Aniq integralning xossalari va uni hisoblash.
4. Aniq integralning fizikaga tatbiqi.
5. Trigonometrik ifodalarni integrallash. Universal usul.
6. Integrallash sohasi chegaralanmagan xosmas integral. Chegaralanmagan funksiyaning xosmas integrali
7. Trigonometrik ifodalarni integrallash. Universal usul.
8. Ratsional funksiyalarni integrallash.
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10. Aniqmas integral va uni topishning sodda usullar
11. Nyuton – Leybnis formulasi. Aniq integrallarni taqribiy hisoblash
12. Trigonometrik ifodalarni integrallash. Universal usul.
13. Aniq integralning fizikaga tatbiqi.
14. Aniq integralning xossalari va uni hisoblash.
15. Aniq integralning ta’rifi, uning mavjudlik shartlari
16. Aniq integralning xossalari va uni hisoblash.
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20. Aniqmas integral va uni topishning sodda usullar
21. Aniq integralning ta’rifi, uning mavjudlik shartlari
22. Chegaralanmagan funksiyaning xosmas integrali
23. Aniq integralning fizikaga tatbiqi.
24. Integrallash sohasi chegaralanmagan xosmas integral.
25. $\int \left(\frac{x}{x^2 - 3x + 2} \right)^2 dx$ aniqmas integralni hisoblang

26. $\int_0^1 \sqrt{4-x^2} dx$ aniq integralni hisoblang
27. $\int_0^{+\infty} e^{-4x} dx$ xosmas integral qiymatini toping
28. $\int \frac{x^3}{(x-1)^{100}} dx$ aniqmas integralni hisoblang
29. $\int_0^2 e^{x^2} x dx$ aniq integralni hisoblang
30. $\int_0^2 |1-x| dx$ aniq integralni hisoblang
31. $\int_0^1 x^{15} \sqrt{1+3x^8} dx$ aniq integralni hisoblang
32. $\int x\sqrt{1-x^2} dx$ aniqmas integralni hisoblang
33. $\int_1^2 \frac{e^{\frac{1}{x^2}}}{x^3} dx$ aniq integralni hisoblang
34. $\int \frac{dx}{\sin x}$ aniqmas integralni hisoblang
35. $\int_0^e \sin(\ln x) dx$ aniq integralni hisoblang
36. $\int_1^{+\infty} \frac{1}{(x+1)\sqrt{x}} dx$ xosmas integral qiymatini toping
37. $\int_0^1 \frac{x^2}{1+x^6} dx$ aniq integralni hisoblang
38. $\int \arctg x dx$ aniqmas integralni hisoblang
39. $\int_{-\infty}^{+\infty} \frac{1}{x^2+6x+12} dx$ menshikli emes integraldi esaplan
40. $\int_0^2 |1-x| dx$ aniq integralni hisoblang
41. $\int_{\frac{\pi}{4}}^{\frac{\pi}{3}} \frac{x}{\sin^2 x} dx$ aniq integralni hisoblang

42. $\int \frac{dx}{(1+x)\sqrt{x}}$ aniqmas integralni hisoblang
43. $\int \frac{\arcsin x}{x^2} dx$ aniqmas integralni hisoblang
44. $\int_0^1 (e^{-x} + 1)^2 dx$ aniq integralni hisoblang
45. $\int_{\frac{\pi}{3}}^{\frac{\pi}{2}} \frac{dx}{3 + \cos x}$ aniq integralni hisoblang
46. $\int \sqrt{1-x^2} dx$ aniqmas integralni hisoblang
47. $\int \frac{dx}{1 + \sqrt{x}}$ aniqmas integralni hisoblang
48. $\int_1^{\sqrt{3}} \arctg \sqrt{x} dx$ aniq integralni hisoblang
49. $\int_{\frac{\pi}{3}}^{\frac{\pi}{2}} \frac{dx}{3 + \cos x}$ aniq integralni hisoblang
50. $\int \frac{dx}{\sqrt{x(1+x)}}$ aniqmas integralni hisoblang
51. $\int \frac{xdx}{(x+1)(x^2+1)}$ aniqmas integralni hisoblang
52. $\int_0^1 \frac{dx}{e^x + e^{-x}}$ aniq integralni hisoblang
53. $\int_{-2}^{-1} \frac{x+1}{x^2(x-1)} dx$ aniq integralni hisoblang
54. $\int \frac{dx}{\sin^2 x + 2 \cos^2 x}$ aniqmas integralni hisoblang
55. $\int \frac{x}{(x^2-1)^{\frac{3}{2}}} dx$ aniqmas integralni hisoblang
56. $\int_0^1 (e^{-x} + 1)^2 dx$ aniq integralni hisoblang
57. $\int \frac{\sin x \cos^3 x}{1 + \cos^2 x} dx$ aniqmas integralni hisoblang

58. $\int_0^1 \frac{x^2}{1+x^6} dx$ aniq integralni hisoblang

59. $\int \sqrt{1-x^2} dx$ aniqmas integralni hisoblang

60. $\int_{13}^{+\infty} \frac{1}{x \ln x} dx$ xosmas integral qiymatini toping