Интегралы

1. $\int \dfrac{dx}{x(1-x)}$;   2. $\int \dfrac{dx}{e^x + e^{-x}}$;   3. $\int \dfrac{\sin x \, dx}{\sqrt{\cos^3 x}}$;   4. $\int x^3(1+x^2)^{1/3} dx$;   5. $\int \dfrac{\sin x \cos^3 x}{1 + \cos^2 x} dx$;

6. $\int \left(\dfrac{\ln x}{x}\right)^2 dx$;   7. $\int (\arcsin x)^2 dx$;   8. $\int x(\operatorname{arctg} x)^2 dx$;   9. $\int x^2(x^3+2)^{1/5} dx$;   10. $\int \dfrac{\sin 2x}{1+\cos^2 x} dx$;

11. $\int x e^{x^2} dx$;   12. $\int \dfrac{x^3 dx}{\sqrt{1-x^8}}$;   13. $\int \dfrac{\cos x \, dx}{a^2 + \sin^2 x}$;   14. $\int \sqrt{\dfrac{1-x}{1+x}} dx$;   15. $\int \dfrac{2x - \sqrt{\arcsin x}}{\sqrt{1-x^2}} dx$;

16. $\int \dfrac{(1+x)^2}{1+x^2} dx$;   17. $\int \dfrac{x^4}{1-x} dx$;   18. $\int \dfrac{dx}{x^2 - 7x + 10}$;   19. $\int \dfrac{dx}{x^4 - x^2}$;   20. $\int \dfrac{x^2 dx}{1 - x^4}$;

21. $\int \cos x \sin^3 x \, dx$;   22. $\int \dfrac{dx}{\cos^4 x}$;   23. $\int \sin^4 x \, dx$;   24. $\int \ln(x^2+1) dx$;   25. $\int x^2 \cos^2 x \, dx$;

26. $\int e^{2x} \sin^2 x \, dx$;   27. $\int \sin^3 x \cos^2 x \, dx$;   28. $\int \dfrac{dx}{\operatorname{tg}^8 x}$;   29. $\int \dfrac{dx}{\sin^3 x}$;   30. $\int \dfrac{dx}{1 + \sin^2 x}$;

31. $\int \dfrac{dx}{5 - 4\sin x + 3\cos x}$;   32. $\int (x^2+3x+5)\cos 2x \, dx$;   33. $\int x e^{x^{1/3}} dx$;   34. $\int \dfrac{dx}{x\sqrt{2 + x - x^2}}$;

35. $\int \sin^8 x \, dx$;   36. $\int \dfrac{dx}{\sqrt{x}(x-1)}$;   37. $\int \dfrac{\sqrt{1-x^3}}{x^2 \sqrt{x}} dx$;   38. $\int \dfrac{x \, dx}{x - \sqrt{x^2 - 1}}$;   39. $\int \dfrac{x\sqrt{1+x}}{\sqrt{1-x}} dx$;

40. $\int \dfrac{\ln(x+1)}{\sqrt{x+1}} dx$;   41. $\int \operatorname{arctg}(1+\sqrt{x}) dx$;   42. $\int \left(1 - \dfrac{1}{x^2}\right) \sqrt{x\sqrt{x}} \, dx$;   43. $\int \sqrt{e^{2x} + 4e^x - 5} \, dx$;

44. $\int \dfrac{x \ln x}{(1+x^2)^2} dx$;   45. $\int \dfrac{\arcsin x}{x^2} \cdot \dfrac{1+x^2}{\sqrt{1-x^2}} dx$;   46. $\int \dfrac{\sqrt{x^4 + x^{-4} + 2}}{x^3} dx$;   47. $\int x^5 e^{x^3} dx$;

48. $\int \dfrac{\operatorname{arctg}\sqrt{x}}{\sqrt{x}} \cdot \dfrac{dx}{1+x}$;   49. $\int x^2 \ln \dfrac{1-x}{1+x} dx$;   50. $\int \ln[(x+a)^{x+a}(x+b)^{x+b}] \cdot \dfrac{dx}{(x+a)(x+b)}$;

51. $\int x\sqrt{x^2+1} \ln\sqrt{x^2-1} \, dx$;   52. $\int \dfrac{x e^x dx}{(x+1)^2}$;   53. $\int \sqrt{x^3 + x^4} \, dx$;   54. $\int \dfrac{dx}{\sqrt[3]{\operatorname{tg} x}}$;

55. $\int \dfrac{x^2 dx}{\sqrt{x^6 + 1}}$;   56. $\int \dfrac{e^{\arcsin x} + x + 1}{\sqrt{1-x^2}} dx$;   57. $\int \dfrac{x e^{\sqrt{x^2-1}}}{\sqrt{x^2-1}} dx$;   58. $\int \left(3 - \dfrac{x}{\sqrt{x^2+1}}\right) \dfrac{dx}{\sqrt{x^2+1}}$;

59. $\int \dfrac{dx}{x\sqrt{1 - 4\ln x}}$;   60. $\int \dfrac{x \, dx}{x^4 - 4}$;   61. $\int \dfrac{dx}{\sqrt[3]{3^x}}$;   62. $\int e^x \sqrt[3]{4 + e^x} \, dx$;   63. $\int e^{\arccos x} dx$;

64. $\int \dfrac{\ln(\ln x)}{x} dx$;   65. $\int \dfrac{x^2 - x}{(x+1)^9} dx$;   66. $\int \dfrac{dx}{x^4 + 2x^2 + 1}$;   67. $\int \dfrac{x^5 + x^2}{x^9 + x^3 - 2} dx$;   68. $\int \dfrac{dx}{x^7 + x^5}$;

69. $\int \dfrac{\cos(x + \frac{\pi}{4})}{\sin x \cos x} dx$.

Спасибо, что дочитали досюда))