

Неодређени интегралы

Наћи неодређени интеграл :

а) $\int (4-3x)e^{-3x} dx$; б) $\int (3x+4)e^{3x} dx$; в) $\int (1-6x)e^{2x} dx$; г) $\int (5x-2)e^{3x} dx$; д) $\int (2-9x)e^{-3x} dx$; ж) $\int (4x-3)e^{-2x} dx$;
 е) $\int (4-16x)\sin 3x dx$; ж) $\int (4x-2)\cos 2x dx$; з) $\int (3x-2)\cos 5x dx$; и) $\int (4x+7)\cos 3x dx$; ј) $\int (8-3x)\cos 5x dx$;
 к) $\int (x\sqrt{2}-3)\cos 2x dx$; л) $\int (\sqrt{2}-8x)\sin 3x dx$; љ) $\int (7x-10)\sin 4x dx$; м) $\int (2-3x)\sin 2x dx$; н) $\int (4x+3)\sin 5x dx$;
 њ) $\int (2-4x)\sin 2x dx$; о) $\int \arctg \sqrt{4x-1} dx$; п) $\int \arctg \sqrt{6x-1} dx$; р) $\int \arctg \sqrt{2x-1} dx$; с) $\int \arctg \sqrt{3x-1} dx$; т) $\int \arctg \sqrt{5x-1} dx$;
 ћ) $\int \ln(x^2+4) dx$; у) $\int \ln(4x^2+1) dx$; ф) $\int \frac{xdx}{\sin^2 x}$; х) $\int \frac{xdx}{\cos^2 x}$; ц) $\int \frac{x \cos dx}{\sin^3 x}$; ч) $\int x \sin^2 x dx$; ш) $\int x \cos^2 x dx$; щ) $\int \frac{x \sin x}{\cos^3 x} dx$.

Наћи неодређени интеграл :

а) $\int (x^2+5x+6)\cos 2x dx$; б) $\int (x^2+4x+3)\cos x dx$; в) $\int (x^2+7x+12)\cos x dx$; г) $\int (9x^2+9x+11)\cos 3x dx$;
 д) $\int (2x^2+4x+7)\cos 2x dx$; ж) $\int (3x^2+5)\cos 2x dx$; е) $\int (8x^2+16x+17)\cos 4x dx$; ж) $\int (3-7x^2)\cos 2x dx$; з) $\int (2x^2-15)\cos 3x dx$;
 и) $\int (1-8x^2)\cos 4x dx$; ј) $\int (x^2+7x+12)\cos x dx$; к) $\int (x^2+2x+1)\sin 3x dx$; л) $\int (x^2-3x)\sin 2x dx$; љ) $\int (x^2-3x+2)\sin x dx$;
 м) $\int (x^2-5x+6)\sin 3x dx$; н) $\int (x^2+6x+9)\sin 2x dx$; њ) $\int (x^2+17,5)\sin 2x dx$; о) $\int (1-5x^2)\sin x dx$; п) $\int (3x-x^2)\sin 2x dx$;
 р) $\int (x+1)^2 \ln^2(x+1) dx$; с) $\int (x-1)^2 \ln^2(x-1) dx$; т) $\int (x+1)^3 \ln^2(x+1) dx$; ћ) $\int \sqrt{x} \ln^2 x dx$; у) $\int x^2 \ln^2 x dx$; ф) $\int \frac{\ln^2 x dx}{\sqrt[3]{x^2}}$;
 х) $\int \frac{\ln^2 x dx}{\sqrt{x}}$; ц) $\int x^2 e^{-x/2} dx$; ч) $\int x^2 e^{3x} dx$; ш) $\int (x^2+2)e^{x/2} dx$; щ) $\int (x^3+3x^2+2x-1)e^{-x/2} dx$.

Наћи неодређени интеграл :

а) $\int \frac{dx}{x\sqrt{x^2+1}}$; б) $\int \frac{dx}{x\sqrt{x^2-1}}$; в) $\int \frac{xdx}{\sqrt{x^4+x^2+1}}$; г) $\int \frac{xdx}{\sqrt[3]{x-1}}$; д) $\int \frac{xdx}{\sqrt{x^4-x^2-1}}$; ж) $\int \frac{(x+1/x)dx}{\sqrt{x^2+1}}$; е) $\int \frac{(x+1/x)dx}{\sqrt{x^2+1}}$;
 ж) $\int \frac{(x-1/x)dx}{\sqrt{x^2+1}}$; з) $\int \frac{(\arcsin^2 x - 1)dx}{\sqrt{1-x^2}}$; и) $\int \frac{(\arctg x + x)dx}{1+x^2}$; ј) $\int \frac{(x - \arctg^4 x)dx}{1+x^2}$; к) $\int \frac{(\arctg^2 x + 1)dx}{1+x^2}$; л) $\int \frac{(8x - \arctg 2x)dx}{1+4x^2}$;
 љ) $\int \frac{(\ln(x-1)+x)dx}{x-1}$; м) $\int \frac{(\ln x + 1)dx}{x-1}$; н) $\int \frac{x^3 dx}{x^2+1}$; њ) $\int \frac{(x^3+x)dx}{x^4+1}$; о) $\int \frac{x^3 dx}{(x^2+1)^2}$; п) $\int \frac{xdx}{x^4+4}$; р) $\int \frac{x^3 dx}{x^2+4}$; с) $\int \frac{(x+\cos x)dx}{x^2+2\sin x}$;
 т) $\int \frac{(3\sin x + 2\cos x)dx}{2\sin x - 3\cos x}$; ж) $\int \frac{(\sin x - \cos x)dx}{(\cos x + \sin x)^2}$; у) $\int \frac{(x^2+1)dx}{(x^3+3x+1)^5}$; ф) $\int \frac{1-\sqrt{x}dx}{(x+1)\sqrt{x}}$; х) $\int \frac{(1+1/2\sqrt{x})dx}{(x+\sqrt{x})^2}$; ц) $\int \frac{(1-\cos x)dx}{(x-\sin x)^2}$;
 ч) $\int \frac{(x \cos x + \sin x)dx}{(x \sin x)^2}$; ш) $\int \frac{\operatorname{tg}(x+1)dx}{\cos^2(x+1)}$; щ) $\int \frac{(3\sin x + 2\cos x)dx}{(2\sin x - 3\cos x)^3}$; щ) $\int \frac{(\arccos^3 x - 1)dx}{\sqrt{1-x^2}}$.

Наћи неодређени интеграл :

а) $\int \frac{(x^3+1)dx}{(x^2-x)}$; б) $\int \frac{(3x^3+1)dx}{(x^2-1)}$; в) $\int \frac{(x^3-17)dx}{(x^2-4x+3)}$; г) $\int \frac{(2x^3+5)dx}{(x^2-x-2)}$; д) $\int \frac{(2x^3-1)dx}{(x^2+x-6)}$; ж) $\int \frac{(3x^3+25)dx}{(x^2+3x+2)}$; е) $\int \frac{(x^3+2x^2+3)dx}{(x-1)(x-2)(x-3)}$;
 ж) $\int \frac{(x^3+2x^2+1)dx}{(x+2)(x-2)(x-1)}$; з) $\int \frac{x^3 dx}{(x-1)(x+1)(x+2)}$; и) $\int \frac{(x^3-3x^2-12)dx}{(x-4)(x-2)x}$; ј) $\int \frac{(x^3-3x^2-12)dx}{(x-4)(x-3)(x-2)}$; к) $\int \frac{(4x^3+x^2+2)dx}{(x-1)(x-2)x}$;
 л) $\int \frac{(3x^3-2)dx}{x^3-x}$; љ) $\int \frac{(x^3+3x^2-1)dx}{x^2+x}$; м) $\int \frac{(x^5-x^3+1)dx}{x^2-x}$; н) $\int \frac{(x^5+3x^3+1)dx}{x^2+x}$; њ) $\int \frac{(2x^5-8x^3+3)dx}{x^2-2x}$;
 о) $\int \frac{(3x^5-12x^3-7)dx}{x^2+2x}$; п) $\int \frac{(-x^5+25x^3+1)dx}{x^2+5x}$; р) $\int \frac{(-x^5+9x^3+4)dx}{x^2+3x}$; с) $\int \frac{(2x^4-5x^2-8x-8)dx}{(x+2)(x-2)x}$;
 т) $\int \frac{(x^4+2x^2-x-3)dx}{(x+1)(x-1)x}$; ж) $\int \frac{(3x^4+3x^2-5x+2)dx}{(x+2)(x-1)x}$; у) $\int \frac{(2x^4+2x^3-41x^2+20)dx}{(x+5)(x-4)x}$; ф) $\int \frac{(3x^3+2x^2-12x-2)dx}{(x+1)(x-2)x}$;
 х) $\int \frac{(x^5-x^4-6x^3+13x+6)dx}{(x+2)(x-3)x}$; ц) $\int \frac{(2x^4+2x^3-3x^2+3x-9)dx}{(x+3)(x-1)x}$; ч) $\int \frac{(2x^3-x^2-7x-12)dx}{(x+1)(x-3)x}$;

$$\text{v)} \int \frac{(x^5 + 2x^4 - 2x^3 + 5x^2 - 7x + 9)dx}{(x+3)(x-1)x}, \text{ш)} \int \frac{(-x^5 - 8x^3 + 1)dx}{x^3 - x}; \text{шш)} \int \frac{(3x^3 - 40x - 8)dx}{x^3 - 9x}$$

Наћи неодређени интеграл :

$$\begin{aligned} \text{a)} & \int \frac{(x^3 + 6x^2 + 13x + 9)dx}{(x+1)(x+2)^3}; \text{б)} \int \frac{(x^3 + 6x^2 + 13x + 8)dx}{x(x+2)^3}; \text{в)} \int \frac{(x^3 - 6x^2 + 11x - 6)dx}{(x+2)(x-2)^3}; \text{г)} \int \frac{(x^3 + 6x^2 + 14x + 10)dx}{(x+1)(x+2)^3}; \\ \text{д)} & \int \frac{(x^3 - 6x^2 + 13x - 6)dx}{(x+2)(x-2)^3}; \text{ђ)} \int \frac{(x^3 + 6x^2 + 11x + 7)dx}{(x+1)(x+2)^3}; \text{е)} \int \frac{(2x^3 + 6x^2 + 7x + 1)dx}{(x-1)(x+1)^3}; \text{ж)} \int \frac{(2x^3 + 6x^2 + 7x + 2)dx}{x(x+1)^3}; \\ \text{з)} & \int \frac{(x^3 - 6x^2 + 13x - 8)dx}{x(x-2)^3}; \text{и)} \int \frac{(x^3 - 6x^2 + 13x - 7)dx}{(x+1)(x+2)^3}; \text{ј)} \int \frac{(x^3 - 6x^2 + 14x - 6)dx}{(x+1)(x+2)^3}; \text{к)} \int \frac{(x^3 - 6x^2 + 10x - 10)dx}{(x+1)(x+2)^3}; \\ \text{л)} & \int \frac{(x^3 + x + 2)dx}{(x+2)x^3}; \text{љ)} \int \frac{(3x^3 + 9x^2 + 10x + 2)dx}{(x-1)(x+1)^3}; \text{м)} \int \frac{(2x^3 + x + 1)dx}{(x+1)x^3}; \text{н)} \int \frac{(2x^3 + 6x^2 + 7x)dx}{(x-2)(x+1)^3}; \text{њ)} \int \frac{(2x^3 + 6x^2 + 5x)dx}{(x+2)(x+1)^3}; \\ \text{о)} & \int \frac{(2x^3 + 6x^2 + 14x + 4)dx}{(x-2)(x+2)^3}; \text{п)} \int \frac{(2x^3 + 6x^2 + 5x + 4)dx}{(x-2)(x+1)^3}; \text{р)} \int \frac{(2x^3 + 6x^2 + 18x - 4)dx}{(x-2)(x+2)^3}; \text{с)} \int \frac{(x^3 + 6x^2 + 4x + 24)dx}{(x-2)(x+2)^3}; \\ \text{т)} & \int \frac{(2x^3 - 6x^2 + 7x - 4)dx}{(x+2)(x-2)^3}; \text{ћ)} \int \frac{(x^3 + 6x^2 + 15x + 2)dx}{(x-2)(x+2)^3}; \text{у)} \int \frac{(x^3 + 6x^2 - 10x + 52)dx}{(x-2)(x+2)^3}; \text{ф)} \int \frac{(2x^3 - 6x^2 + 7x)dx}{(x+2)(x-1)^3}; \\ \text{х)} & \int \frac{(x^3 + 6x^2 + 13x + 6)dx}{(x-2)(x+2)^3}; \text{ц)} \int \frac{(x^3 - 6x^2 + 13x - 6)dx}{(x-2)(x+2)^3}; \text{ч)} \int \frac{(x^3 - 6x^2 + 13x - 6)dx}{(x+2)(x-2)^3}; \text{ш)} \int \frac{(2x^3 - 6x^2 + 7x - 4)dx}{(x-2)(x-1)^3}; \\ \text{ш)} & \int \frac{(2x^3 + 6x^2 + 10x + 12)dx}{(x-2)(x+2)^3}; \text{шш)} \int \frac{(2x^3 - 6x^2 + 7x - 4)dx}{(x-2)(x+2)^3}. \end{aligned}$$

Наћи неодређени интеграл :

$$\begin{aligned} \text{a)} & \int \frac{(x^3 + 4x^2 + 4x + 2)dx}{(x^2 + x + 1)(x+1)^2}; \text{б)} \int \frac{(x^3 + 4x^2 + 3x + 2)dx}{(x^2 + 1)(x+1)^2}; \text{в)} \int \frac{(2x^3 + 7x^2 + 7x - 1)dx}{(x^2 + x + 1)(x+2)^2}; \text{г)} \int \frac{(2x^3 + 4x^2 + 2x - 1)dx}{(x^2 + 2x + 2)(x+1)^2}; \\ \text{д)} & \int \frac{(x^3 + 6x^2 + 9x + 6)dx}{(x^2 + 2x + 2)(x+1)^2}; \text{ђ)} \int \frac{(2x^3 + 11x^2 + 16x + 10)dx}{(x^2 + 2x + 3)(x+2)^2}; \text{е)} \int \frac{(3x^3 + 6x^2 + 5x - 1)dx}{(x^2 + 2)(x+1)^2}; \text{ж)} \int \frac{(x^3 + 9x^2 + 21x + 21)dx}{(x^2 + 2x + 3)(x+2)^2}; \\ \text{з)} & \int \frac{(x^3 + 6x^2 + 8x + 8)dx}{(x^2 + 4)(x+2)^2}; \text{и)} \int \frac{(x^3 + 5x^2 + 12x + 4)dx}{(x^2 + 4)(x+2)^2}; \text{ј)} \int \frac{(2x^3 - 4x^2 - 16x - 12)dx}{(x^2 + 4x + 5)(x-1)^2}; \text{к)} \int \frac{(-3x^3 + 13x^2 - 13x + 1)dx}{(x^2 - x + 1)(x-2)^2}; \\ \text{л)} & \int \frac{(x^3 + 2x^2 + 10x)dx}{(x^2 - x + 1)(x+1)^2}; \text{љ)} \int \frac{(3x^3 + x + 46)dx}{(x^2 + 9)(x-1)^2}; \text{м)} \int \frac{(4x^3 + 24x^2 + 20x - 28)dx}{(x^2 + 2x + 2)(x+3)^2}; \text{н)} \int \frac{(2x^3 + 3x^2 + 3x + 2)dx}{(x^2 + x + 1)(x^2 + 1)}; \\ \text{њ)} & \int \frac{(x^3 + x + 1)dx}{(x^2 + x + 1)(x^2 + 1)}; \text{о)} \int \frac{(2x^3 + 4x^2 + 2x + 2)dx}{(x^2 + x + 1)(x^2 + x + 2)}; \text{п)} \int \frac{(2x^3 + 7x^2 + 7x + 9)dx}{(x^2 + x + 1)(x^2 + x + 2)}; \text{р)} \int \frac{(4x^3 + 3x + 4)dx}{(x^2 + 1)(x^2 + x + 2)}; \\ \text{с)} & \int \frac{(3x^3 + 4x^2 + 6x)dx}{(x^2 + 2)(x^2 + 2x + 2)}; \text{т)} \int \frac{(2x^3 + x + 1)dx}{(x^2 - x + 1)(x^2 + 1)}; \text{ћ)} \int \frac{(2x^3 + 2x + 1)dx}{(x^2 - x + 1)(x^2 + 2)}; \text{у)} \int \frac{(2x^2 - x + 1)dx}{(x^2 - x + 1)(x^2 + 1)}; \text{ф)} \int \frac{(4x^2 + 3x + 4)dx}{(x^2 + 1)(x^2 + x + 1)}; \\ \text{х)} & \int \frac{(x + 4)dx}{(x^2 + 2)(x^2 + x + 2)}; \text{ц)} \int \frac{(2x^3 + 3x^2 + 3x + 2)dx}{(x^2 + x + 1)(x^2 + 1)}; \text{ч)} \int \frac{(3x^3 + 7x^2 + 12x + 6)dx}{(x^2 + x + 3)(x^2 + 2x + 3)}; \text{ш)} \int \frac{(2x^3 + 2x^2 + 2x + 1)dx}{(x^2 + x + 1)(x^2 + 1)}; \\ \text{ш)} & \int \frac{(x^3 + 2x^2 + x + 1)dx}{(x^2 + x + 1)(x^2 + 1)}; \text{шш)} \int \frac{(x^3 + 2x + 2)dx}{(x^2 - x + 1)(x^2 + 1)}. \end{aligned}$$

Изрчунај одређени интеграл :

$$\begin{aligned} \text{a)} & \int_{\pi/2}^{2\arctg 2} \frac{dx}{\sin^2 x(1 - \cos x)}; \text{б)} \int_0^{\pi/2} \frac{\cos x dx}{(2 + \cos x)}; \text{в)} \int_{\pi/2}^{2\arctg 2} \frac{dx}{\sin^2 x(1 + \cos x)}; \text{г)} \int_{2\arctg(1/3)}^{2\arctg(1/2)} \frac{dx}{\sin x(1 - \cos x)}; \\ \text{д)} & \int_{2\arctg 2}^{2\arctg 3} \frac{dx}{\cos x(1 - \cos x)}; \text{ђ)} \int_{2\arctg(1/2)}^{\pi/2} \frac{dx}{(1 + \sin x - \cos x)^2}; \text{е)} \int_{2\arctg(1/2)}^{\pi/2} \frac{\cos x dx}{(1 - \cos x)^3}; \text{ж)} \int_0^{\pi/2} \frac{(\cos x - \sin x)dx}{(1 + \sin x)^2}; \end{aligned}$$

$$\begin{aligned}
& 3) \int_0^{\pi/2} \frac{\cos x dx}{(5+4\cos x)} ; \text{и)} \int_0^{2\pi/3} \frac{(1+\sin x) dx}{(1+\sin x+\cos x)} ; \text{j)} \int_{\pi/3}^{\pi/2} \frac{\cos x dx}{(1+\sin x-\cos x)} ; \text{к)} \int_0^{\pi/3} \frac{(1+\cos x) dx}{(1+\sin x+\cos x)} ; \\
& \text{л)} \int_0^{\pi/2} \frac{\sin x dx}{(1+\cos x+\sin x)} ; \text{ь)} \int_0^2 \frac{\cos x dx}{(1+\cos x+\sin x)} ; \text{м)} \int_0^{2\arctg(1/2)} \frac{\cos x dx}{(1-\sin x)(1+\cos x)} ; \text{н)} \int_0^{2\arctg(1/2)} \frac{(1+\sin x) dx}{(1-\sin x)} ; \\
& \text{б)} \int_{-2\pi/3}^0 \frac{\cos x dx}{(1+\sin x-\cos x)} ; \text{о)} \int_{-\pi/3}^0 \frac{\cos x dx}{(1+\sin x-\cos x)^2} ; \text{п)} \int_0^{\pi/2} \frac{\cos x dx}{(1+\sin x+\cos x)^2} ; \text{р)} \int_0^{2\arctg(1/2)} \frac{(1-\sin x) dx}{\cos x(1+\cos x)} ; \\
& \text{с)} \int_0^{\pi/2} \frac{\sin x dx}{(2+\sin x)} ; \text{т)} \int_0^{\pi/2} \frac{\sin x dx}{(5+3\sin x)} ; \text{г)} \int_0^{\pi/2} \frac{dx}{(1+\cos x+\sin x)^2} ; \text{д)} \int_0^{\pi/4} \frac{dx}{(1+\cos x)\cos x} ; \text{ф)} \int_0^{\pi/2} \frac{\sin^2 x dx}{(1+\cos x+\sin x)^2} ; \\
& \text{х)} \int_0^{2\pi/3} \frac{\cos^2 x dx}{(1+\cos x-\sin x)^2} ; \text{ц)} \int_{-2\pi/3}^0 \frac{\cos^2 x dx}{(1+\cos x-\sin x)^2} ; \text{ч)} \int_{\pi/2}^{2\arctg 2} \frac{dx}{\sin x(1+\sin x)} ; \text{ш)} \int_0^{2\arctg 1/2} \frac{(1-\sin x) dx}{\cos x(1+\cos x)} ; \\
& \text{ш)} \int_0^{\pi/2} \frac{\sin x dx}{(1+\sin x)^2} ; \text{шшш)} \int_{-\pi/2}^0 \frac{\sin x dx}{(1+\cos x-\sin x)^2} .
\end{aligned}$$

Изрчунај одређени интеграл :

$$\begin{aligned}
& \text{а)} \int_{\pi/2}^{2\arctg 2} \frac{dx}{\sin^2 x(1-\cos x)} ; \text{б)} \int_0^{\pi/2} \frac{\cos x dx}{(2+\cos x)} ; \text{в)} \int_{\pi/2}^{2\arctg 2} \frac{dx}{\sin^2 x(1+\cos x)} ; \text{г)} \int_{2\arctg(1/3)}^{2\arctg(1/2)} \frac{dx}{\sin x(1-\cos x)} ; \\
& \text{д)} \int_{2\arctg 2}^{2\arctg 3} \frac{dx}{\cos x(1-\cos x)} ; \text{ђ)} \int_{2\arctg(1/2)}^{\pi/2} \frac{dx}{(1+\sin x-\cos x)^2} ; \text{е)} \int_{2\arctg(1/2)}^{\pi/2} \frac{\cos x dx}{(1-\cos x)^3} ; \text{ж)} \int_0^{\pi/2} \frac{(\cos x-\sin x) dx}{(1+\sin x)^2} ; \\
& 3) \int_0^{\pi/2} \frac{\cos x dx}{(5+4\cos x)} ; \text{и)} \int_0^{2\pi/3} \frac{(1+\sin x) dx}{(1+\sin x+\cos x)} ; \text{j)} \int_{\pi/3}^{\pi/2} \frac{\cos x dx}{(1+\sin x-\cos x)} ; \text{к)} \int_0^{\pi/3} \frac{(1+\cos x) dx}{(1+\sin x+\cos x)} ; \\
& \text{л)} \int_0^{\pi/2} \frac{\sin x dx}{(1+\cos x+\sin x)} ; \text{ь)} \int_0^2 \frac{\cos x dx}{(1+\cos x+\sin x)} ; \text{м)} \int_0^{2\arctg(1/2)} \frac{\cos x dx}{(1-\sin x)(1+\cos x)} ; \text{н)} \int_0^{2\arctg(1/2)} \frac{(1+\sin x) dx}{(1-\sin x)} ; \\
& \text{б)} \int_{-2\pi/3}^0 \frac{\cos x dx}{(1+\sin x-\cos x)} ; \text{о)} \int_{-\pi/3}^0 \frac{\cos x dx}{(1+\sin x-\cos x)^2} ; \text{п)} \int_0^{\pi/2} \frac{\cos x dx}{(1+\sin x+\cos x)^2} ; \text{р)} \int_0^{2\arctg(1/2)} \frac{(1-\sin x) dx}{\cos x(1+\cos x)} ; \\
& \text{с)} \int_0^{\pi/2} \frac{\sin x dx}{(2+\sin x)} ; \text{т)} \int_0^{\pi/2} \frac{\sin x dx}{(5+3\sin x)} ; \text{г)} \int_0^{\pi/2} \frac{dx}{(1+\cos x+\sin x)^2} ; \text{д)} \int_0^{\pi/4} \frac{dx}{(1+\cos x)\cos x} ; \text{ф)} \int_0^{\pi/2} \frac{\sin^2 x dx}{(1+\cos x+\sin x)^2} ; \\
& \text{х)} \int_0^{2\pi/3} \frac{\cos^2 x dx}{(1+\cos x-\sin x)^2} ; \text{ц)} \int_{-2\pi/3}^0 \frac{\cos^2 x dx}{(1+\cos x-\sin x)^2} ; \text{ч)} \int_{\pi/2}^{2\arctg 2} \frac{dx}{\sin x(1+\sin x)} ; \text{ш)} \int_0^{2\arctg 1/2} \frac{(1-\sin x) dx}{\cos x(1+\cos x)} ; \\
& \text{ш)} \int_0^{\pi/2} \frac{\sin x dx}{(1+\sin x)^2} ; \text{шшш)} \int_{-\pi/2}^0 \frac{\sin x dx}{(1+\cos x-\sin x)^2} .
\end{aligned}$$

Наћи неодређени интеграл а) $\int \frac{\sqrt{1+\sqrt{x}} dx}{x^4\sqrt{x^3}}$; б) $\int \frac{\sqrt[3]{1+\sqrt{x}} dx}{x^3\sqrt{x^2}}$; в) $\int \frac{\sqrt{1+\sqrt[3]{x}} dx}{x\sqrt{x}}$; г) $\int \frac{\sqrt{1+\sqrt[3]{x}} dx}{x^9\sqrt{x^4}}$; д) $\int \frac{\sqrt[3]{1+\sqrt[3]{x^2}} dx}{x^9\sqrt{x^8}}$; ђ) $\int \frac{\sqrt[3]{(1+\sqrt[3]{x})^2} dx}{x^9\sqrt{x^5}}$; е) $\int \frac{\sqrt[3]{(1+\sqrt[3]{x})^2} dx}{x^{29}\sqrt{x}}$; ж) $\int \frac{\sqrt[3]{(1+\sqrt{x})^2} dx}{x^6\sqrt{x^5}}$; з) $\int \frac{\sqrt[3]{1+\sqrt[3]{x^2}} dx}{x^2}$; и) $\int \frac{\sqrt[3]{1+\sqrt[3]{x}} dx}{x^2\sqrt{x}}$; ј) $\int \frac{\sqrt[4]{(1+\sqrt{x})^3} dx}{x^8\sqrt{x^7}}$; к)

$$\begin{aligned}
& \int \frac{\sqrt[4]{(1+\sqrt[3]{x})^3} dx}{x^{12}\sqrt{x^7}} ; \text{л)} \int \frac{\sqrt[4]{(1+\sqrt[3]{x^2})^3} dx}{x^{26}\sqrt{x}} ; \text{лб)} \int \frac{\sqrt[3]{(1+\sqrt[4]{x^3})^2} dx}{x^{24}\sqrt{x}} ; \text{м)} \int \frac{\sqrt[5]{(1+\sqrt{x})^4} dx}{x^{10}\sqrt{x^9}} ; \text{н)} \int \frac{\sqrt[5]{(1+\sqrt[3]{x})^4} dx}{x^5\sqrt{x^3}} ; \text{нб)} \int \frac{\sqrt[5]{(1+\sqrt[3]{x^2})^4} dx}{x^{25}\sqrt{x}} ; \text{о)} \\
& \int \frac{\sqrt[5]{(1+\sqrt[5]{x^4})} dx}{x^{22}\sqrt[5]{x^{11}}} ; \text{п)} \int \frac{\sqrt[5]{(1+\sqrt[4]{x^3})^4} dx}{x^{220}\sqrt{x^7}} ; \text{пб)} \int \frac{\sqrt[5]{(1+\sqrt{x})^4} dx}{x^{210}\sqrt{x^9}} ; \text{с)} \int \frac{\sqrt[5]{(1+\sqrt[5]{x^4})} dx}{x^{25}\sqrt{x}} ; \\
& \text{р)} \int \frac{\sqrt[3]{1+\sqrt[5]{x^4}} dx}{x^{215}\sqrt{x}} \text{н)} \int \frac{\sqrt[3]{(1+\sqrt[5]{x^4})^2} dx}{x^{23}\sqrt{x}} ; \text{я)} \int \frac{\sqrt[4]{1+\sqrt[3]{x^2}} dx}{x^{212}\sqrt{x^5}} ; \text{ф)} \int \frac{\sqrt[3]{1+\sqrt[4]{x}} dx}{x^3\sqrt{x}} ; \text{х)} \int \frac{\sqrt[3]{(1+\sqrt[4]{x})^2} dx}{x^{212}\sqrt{x^5}} ; \text{и)} \int \frac{\sqrt[3]{1+\sqrt[5]{x}} dx}{x^{15}\sqrt{x^4}} ; \\
& \text{ч)} \int \frac{\sqrt[5]{1+\sqrt[3]{x}} dx}{x^5\sqrt{x^2}} ; \text{и)} \int \frac{\sqrt[4]{1+\sqrt[3]{x^2}} dx}{x^6\sqrt{x^5}} ; \text{ш)} \int \frac{\sqrt[4]{(1+\sqrt[5]{x^4})^3} dx}{x^{25}\sqrt{x^2}} .
\end{aligned}$$