Лабораторная работа №4
Определенный интеграл

№ Варианта	Подынтегральная функция	Шаг	Точность	Отрезок
1	$2^{3\cdot x}$	0.1	0.001	[0 ;1]
2	$\frac{1}{\sin^2\frac{x}{3}}$	π/16	0.001	[π/4 ; 3π/4]
3	$\frac{1}{\cos^2\frac{x}{3}}$	π/16	0.001	[-π/2 ; π/2]
4	$\frac{1}{3\cdot x-7}$	0.1	0.001	[4 ; 5]
5	$\frac{1}{1-x}$	0.1	0.001	[2 ; 3]
6	$\frac{1}{5-2\cdot x}$	0.1	0.001	[1 ; 2]
7	$tg\,2\cdot x$	π/16	0.001	[0 ; π/8]
8	$\sin^2 x\cdot\cos x$	π/16	0.001	[0 ; π/2]
9	$\cos^3 x\cdot\sin x$	π/16	0.001	[0 ; π/2]
10	$\sqrt{x^2+1}\cdot x$	0.1	0.001	[0 ; 2]
11	$\frac{x}{\sqrt{2\cdot x^3+3}}$	0.1	0.001	[0 ; 1]
12	$\frac{x^2}{\sqrt{x^3+1}}$	0.1	0.001	[0 ; 1]
13	$\frac{\ln(x+1)}{x+1}$	0.1	0.001	[0 ; 1]
14	$\frac{1}{1+2\cdot x^2}$	0.1	0.001	[0 ; 1]
15	$\frac{e^x}{1+e^{2\cdot x}}$	0.1	0.001	[0 ; 1]
16	$x\cdot e^x$	0.1	0.001	[-1 ; 1]
17	$\sin^3 x$	π/16	0.001	[π/16 ; π/2]
18	$\frac{\cos x}{\sin^2 x}$	π/16	0.001	[π/4 ; π/2]
19	$\sin x\cdot\cos 3x$	π/16	0.001	[0 ; π/2]
20	$\frac{\cos x}{\sqrt{2\cdot\sin x+1}}$	π/16	0.001	[0 ; π/2]
21	$\frac{x^2}{x+1}$	0.1	0.001	[1 ; 2]

22	$\sqrt{x^3+1}\cdot x^2$	0.1	0.001	[0 ; 1]
23	$\sqrt{5\cdot x^2+1}\cdot x$	0.1	0.001	[1 ; 2]
24	$\frac{1}{x\cdot \ln x}$	0.1	0.001	[3 ; 5]
25	$\frac{x}{4+x^2}$	0.1	0.001	[1 ; 3]
26	$\frac{\sin 2x}{(1+\cos 2x)^2}$	π/16	0.001	[0 ; π/4]
27	$\frac{\sin 2x}{(1+\sin^2 x)^2}$	π/16	0.001	[0 ; π/2]
28	$x\cdot \sin x$	0.1	0.001	[1 ; 2]
29	$x\cdot \cos x$	0.1	0.001	[1 ; 3]
30	$\frac{\ln(x^2+2)}{x+2}$	0.1	0.001	[0 ; 1]