

1а. Программирование формул

Задать значения переменных, согласно варианту задания. Записать и вычислить выражение на языке MATLAB. Результат вывести в Command Window с помощью функции disp().

№	Выражение	Переменные
1	$y = \sin \frac{a-x}{c} + 10^4 \sqrt[3]{\frac{a-kx^2}{2b} + \frac{\cos kx^2}{\operatorname{tg} 3} - \frac{bc}{ax}}$	$a = -1.3; b = 0.91;$ $c = 0.75; x = 2.32; k = 8.$
2	$y = -\frac{(x-d)(x^2+b^2)}{\sqrt[3]{x^2+b^2-cd}} + 10^{-3} \operatorname{tg} kn - \frac{\cos kx}{\sin 5}.$	$d = 1.25; b = 0.75; n = 4;$ $c = 2.2; x = 0.32; k = 2.$
3	$y = \operatorname{tg} ik + 10^3 e^{-5} + \sqrt[3]{\frac{10^2 xk }{(a+b)^2} - \frac{ax^3-b}{(a+b)^2}}.$	$i = 5; b = 2.35;$ $a = 25.2; x = 0.1; k = -2.$
4	$y = \frac{\sqrt{ c-d +(a+c)^2}}{\sin 2i} + 10^{-3} e^{ix} - \frac{ c-d +a^2}{\sqrt[3]{(a+c)^2}}.$	$a = -1.25; d = 2.5; i = 5;$ $c = 0.05; x = 1.35.$
5	$y = \frac{\ln kx }{\sin 7} - \sqrt{ x-a^2 } - \frac{10^4 a-b}{\cos kx} + \sqrt[3]{x-a^2} + c^3 x.$	$a = 0.93; b = 5.61;$ $c = 0.31; x = -2.5;$ $k = 2.$
6	$y = 10^4 \frac{ax}{b^2} - \left \frac{a-b}{kx} \right + \frac{\ln 3}{\sqrt[3]{ax^2+b^2}} - e^{-kx}$	$b = 0.35;$ $a = 3.5; x = 1.523; k = -2.$
7	$y = -\frac{ b-a }{kx} + 10^4 \sqrt[5]{ \cos kx } + \sqrt{\frac{abc}{2.4}} - \frac{0.7abc}{\sin 7}.$	$a = 1.7; b = -1.25;$ $c = -0.3; x = 2.5; k = 3.$
8	$y = \frac{ a^2-b^2 }{\sin kx} + 10^4 \sqrt[5]{ \sin kx-bc } - \frac{k^2+\operatorname{tg} 3k}{e^{kx}}.$	$a = 1.3; b = 2.42;$ $c = 0.83; x = 1.5;$ $k = 2.$
9	$y = \frac{\sqrt[3]{\ln x+a^2}}{0.47x^2} - \left 0.47x^2 - \frac{10^4}{7} \cos^2 k \right - \frac{c}{x}$	$c = 1.52;$ $a = -2.4; x = 0.29; k = 3.$
10	$y = \frac{1.5(a-b)^2}{ a-b c} + \frac{i}{5} + 10^3 \sqrt{ a-b } - \frac{(a+x^2)\cos 7}{ix^2+a^2bc}$	$a = -2.5; b = 1.35; i = 3;$ $c = -0.72; x = 2.75.$
11	$y = 10^4 \sin^2 i - \frac{0.32x^3+4x+b}{\cos ia} \sqrt[6]{0.32x^3-b+ b }$	$a = 3.5; b = -0.7; i = 2;$ $x = 0.8.$
12	$y = -\frac{\cos i}{\sin kx} + \frac{ax^2+ d }{(a+b)^2} - 10^4 \sqrt[6]{\frac{kx}{(a+b)^2}}.$	$d = -0.01; b = 1.25;$ $a = 4.72; i = 2;$ $x = 2.25; k = 3.$
13	$y = \cos k(x-a) + 10^{-4} \frac{(x+a)^3+x^4d}{k(x-a)^3} + \frac{\sqrt[5]{ x+a }}{2.4b}.$	$d = 0.95; b = 0.05; a = -3.25;$ $x = 8.2; k = 4.$
14	$y = \sqrt[5]{ ax^2-b^3 } + \ln kx - \frac{e^{kx}+c^2}{\sin kx} - 10^{-3} \sqrt{2157}.$	$c = 1.72; b = -0.31; a = 2.01;$ $x = 0.48; k = 3.$
15	$y = \frac{1}{9} - 10^{-4} e^{kx} + \cos \sqrt{(x^2+b)} + \frac{\sqrt{x^2+b}}{0.4x} +$ $+ \frac{\sin 3}{(x^2+b)n}.$	$x = 2.5; b = 0.04;$ $k = 3; n = 5.$

