## Индивидуальные задания ч1

Составить программу для табулирования функции y(x), вывести на экран значения x и y(x)

| 1)  | y=10 <sup>-2</sup> bc/x + cos $\sqrt{a^3x}$ ,<br>x <sub>0</sub> = -1.5; x <sub>k</sub> = 3.5; dx = 0.5;<br>a = -1.25; b = -1.5; c = 0.75; | 2) $y=1.2(a-b)^3 e^{x^2} + x$ ,<br>$x_0 = -0.75$ ; $x_k = -1.5$ ; $dx = -0.05$ ;<br>a = 1.5; $b = 1.2$ ;  |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| 3)  | $y = 10^{-1} ax^{3} tg(a - bx),$<br>$x_{0} = -0.5; x_{k} = 2.5; dx = 0.05;$<br>a = 10.2; b = 1.25;                                        | 4) $y = ax^3 + cos^2(x^3 - b)$ ,<br>$x_0 = 5.3$ ; $x_k = 10.3$ ; $dx = 0.25$ ;<br>a = 1.35; $b = -6.25$ ; |
| 5)  | $y = x^4 + \cos(2 + x^3 - d),$<br>$x_0 = 4.6; x_k = 5.8; dx = 0.2;$<br>d = 1.3;                                                           | 6) $y = x^2 + tg(5x + b/x)$ ,<br>$x_0 = -1.5$ ; $x_k = -2.5$ ; $dx = -0.5$ ;<br>b = -0.8;                 |
| 7)  | $y = 9(x + 15\sqrt{x^3 + b^3}),$<br>$x_0 = -2.4; x_k = 1; dx = 0.2;$<br>b = 2.5;                                                          | 8) $y=9x^4 + \sin(57.2 + x)$ ,<br>$x_0 = -0.75$ ; $x_k = -2.05$ ; $dx = -0.2$ ;                           |
| 9)  | $y = 0.0025bx^3 + \sqrt{x + e^{0.82}},$<br>$x_0 = -1; x_k = 4; dx = 0.5;$<br>b = 2.3;                                                     | 10) $y = x \cdot \sin(\sqrt{x + b - 0.0084}),$<br>$x_0 = -2.05; x_k = -3.05; dx = -0.2;$<br>b = 3.4;      |
| 11) | $y = x + \sqrt{ x^3 + a - be^x },$<br>$x_0 = -4; x_k = -6.2; dx = -0.2;$<br>a = 0.1;                                                      | 12) $y = 9(x^3 + b^3)tgx$ ,<br>$x_0 = 1$ ; $x_k = 2.2$ ; $dx = 0.2$ ;<br>b = 3.2;                         |
| 13) | $y =  x - b ^{1/2} /  b^3 - x^3 ^{3/2} + \ln x - b ,$                                                                                     | 14) $y = (x^{5/2} - b) \ln(x^2 + 12.7),$                                                                  |

 $x_0 = -0.73$ ,  $x_k = -1.73$ , dx = -0.1;

b = -2;

 $x_0 = 0.25; x_k = 5.2; dx = 0.3;$ 

b = 0.8;

| 15) $y = 10^{-3} x ^{5/2} + \ln x+b $                 | 16) $y=15.28x ^{-3/2}+\cos(\ln x + b)$ ,           |
|-------------------------------------------------------|----------------------------------------------------|
| $x_0 = 1.75; x_k = -2.5; dx = -0.25;$                 | $x_0 = 1.23$ ; $x_k = -2.4$ ; $dx = -0.3$ ;        |
| b = 35.4;                                             | b = 12.6;                                          |
|                                                       |                                                    |
| 17) $y = 0.00084(\ln x ^{5/4} + b)/(x^2 + 3.82)$      | ), 18) $y = 0.8 \cdot 10^{-5} (x^3 + b^3)^{7/6}$ , |
| $x_0 = -2.35, x_k = -2, dx = 0.05,$                   | $x_0 = -0.05; x_k = 0.15; dx = 0.01;$              |
| b = 74.2;                                             | b = 6.74;                                          |
|                                                       |                                                    |
| 19) $y = (ln(sin(x^3 + 0.0025)))^{3/2} + 0.8 \cdot 1$ | $0^{-2},0$ ) $y = a + x^{2/3} \cos(x + e^x),$      |
| $x_0 = 0.12; x_k = 0.64; dx = 0.2;$                   | $x_0 = 5.62; x_k = 15.62; dx = 0.5;$               |
|                                                       | a = 0.41;                                          |
|                                                       |                                                    |
| 21) $y = x^{b^b} + \cos(x^{3/2} + b^{3/4}),$          | 22) $y=10^{-2}(a+bx)-e^{x^3+b}$ ,                  |
| $x_0 = 13.7; x_k = 19.1; dx = 0.4;$                   | $x_0 = -3.4; x_k = -1.4; dx = 0.1;$                |
| b = 2;                                                | a = 5; b = 4;                                      |
|                                                       |                                                    |
| 23) $y = ax^3 + b^{5/4}xe^{-x}$ ,                     | 24) $y = a x ^{5/2} + \cos(\sqrt{e^x}),$           |
| $x_0 = 2.51; x_k = 10.59; dx = 1.01;$                 | $x_0 = -0.31; x_k = 0.61; dx = 0.3;$               |
| a = 4; b = 2;                                         | a=8;                                               |
|                                                       |                                                    |
| 25) $y = 3.1\sqrt{ax^2 -  a+b x}$ ,                   |                                                    |
| $x_0 = -2.35; x_k = -5.55; dx = -0.05;$               |                                                    |
| a = 2; b = -5;                                        |                                                    |
|                                                       |                                                    |