

Mustaqil ishlash uchun variantlar:

1-variant

Takrorlash operatorining uchta ko‘rinishining xar biridan foydalanib, $F = 10!$ xisoblansin.

2-variant

Quyidagini xisoblash dasturini tuzing:

$$p = (1 - \frac{1}{2^2})(1 - \frac{1}{3^2}) \dots (1 - \frac{1}{3^2});$$

3-variant

Quyidagini xisoblash dasturini tuzing:

$$y = \cos(x) + \cos(x^2) + \cos(x^3) + \dots + \cos(x^{30});$$

4-variant

Quyidagini xisoblash dasturini tuzing:

$$y = 1! + 2! + 3! + \dots + n!, n > 1.$$

5-variant

Berilgan 10 ta xaqiqiy sonlarning eng kattasi va eng kichigi orasidagi ayirmani topadigan dastur tuzilsin.

6-variant

Quyidagilarni xisoblash dasturini tuzing:

$$y = (2n - 1)! = 1 * 3 * 5 * \dots * (2n - 1), n > 0;$$

7-variant

Xar xil natural sonlardan tashkil topgan ketma-ketlik eng kichik elementining tartib nomerini aniqlang.

8-variant

Quyidagini xisoblash dasturini tuzing:

$$y = \sin 1 + \sin 1.1 + \sin 1.2 + \dots + \sin 2.$$

9-variant

Uch xilssiklik operatorlarni ishlatib, $n=(a+b)!$ ni hisoblash uchun dasturlar tuzilsin.

10-variant

$S = \prod_{k=1}^7 \sum_{n=1}^5 \cos^2 kn$ qiymatini topish uchun uch xil takrorlash operatorlari yordamida dastur tuzing.

11-variant

$P = \sum_{k=1}^5 \prod_{i=1}^{10} \sqrt{b+i}$ qiymatini topish uchun uch xil takrorlash operatorlari yordamida dastur tuzing.

12-variant

Quyidagi misollarga dastur tuzing:

$$z = \frac{a^8 + \operatorname{tg}(ax + b)}{\log_2(ax^2 + b)}$$

$$p = \sin^4(ax + x^2) + e^{3x} \quad \text{bu yerda } a=1.2, \quad v=3.2, \quad x \in [1;4] \Delta x = 0,2$$

13-variant

Quyidagi misollarga dastur tuzing:

$$z = \begin{cases} a^3 x + \cos(x+1)^2 & x > 2 \\ e^{x+1} - \sin^2 x & 1 \leq x \leq 2 \\ \log_3 x - 2^{\sin^2 x} & x < 1 \end{cases}$$

$$\text{bu yerda } a=4; \quad x \in [1;4] \Delta x = 0,2$$

14-variant

Quyidagi misollarga dastur tuzing:

$$z = \begin{cases} ax^{\operatorname{tg} x} + \log_4^5(x+1) & x > 2 \\ a^{x+1} & 1 \leq x \leq 2 \\ x \sin^7 x - 2|\cos x| & x < 1 \end{cases}$$

$$\text{bu yerda } a = 1.2 \quad x \in [0;4] \Delta x = 0,2$$

15-variant

Quyidagi misollarga dastur tuzing:

$$z = \begin{cases} a^{\sqrt[6]{x}} \lg x & x > 2 \\ 3^{ax^3+1} & 1 \leq x \leq 2 \\ x^4 - 2\sqrt[4]{x^5} & x < 1 \end{cases} \quad \text{bu yerda } a = 1.2 \quad x \in [0;3] \Delta x = 0,1$$

16-variant

Quyidagi misollarga dastur tuzing:

$$z = \begin{cases} \sqrt[3]{a} \cdot x + 1 & x > 2 \\ 5^{x+1} & 0 \leq x \leq 2 \\ (x+2)^x - 2 & x < 0 \end{cases} \quad \text{bu yerda } x \in [3;7] \Delta x = 0,3$$

17-variant

Quyidagi misollarga dastur tuzing:

$$z = \begin{cases} \sqrt[3]{a} \cdot 8^x + 1 & x > 2 \\ e^{x+1} & 0 \leq x \leq 2 \\ \lg x + \sqrt{2} & x < 0 \end{cases} \quad \text{bu yerda } a = 2.2 \quad x \in [4;8] \Delta x = 0,2$$

18-variant

Quyidagi misollarga dastur tuzing:

$$z = \frac{e^8 + \cos^4(ax+b)}{\lg(ax^2+b)}$$

$$p = \ln^4(ax+x^2) + e^{3x} \quad \text{bu yerda } a=1.2, \quad b=3.2, \quad x \in [1;4] \Delta x = 0,2$$

19-variant

.Quyidagi misollarga dastur tuzing:

$$z = \begin{cases} a^{\sqrt[5]{x}} + \arctg^2 x & x > 4 \\ \sqrt{x^3 - 2} & x < 4 \end{cases} \quad \text{bu yerda } a = 1.2 \quad x \in [2;6] \Delta x = 0,3$$

20-variant

Quyidagi misollarga dastur tuzing:

$$z = \begin{cases} \lg(ax^{\sin x}) + tg^2 x & x > 5 \\ a^{x+1} & 1 \leq x \leq 5 \\ x^2 - 2 \cos x^4 & x < 1 \end{cases}$$

bu yerda $a = 1.2 \quad x \in [1; 3] \quad \Delta x = 0.1$