

Вариант	Формулы
1	$A = \begin{pmatrix} \frac{a_{11}}{4} & a_{12} & a_{13} \\ a_{21} & a_{22} - 2 & a_{23} * 8 \\ a_{31}^2 & 1 & 0 \end{pmatrix}$ $F(x) = \int_a^{\infty} \frac{\sin^2(\pi x)}{\sqrt{x}} dx$
2	$G(x) = \begin{cases} \sqrt[3]{x}, & \text{при } x < \sin^3(\pi x), \\ \frac{\partial f(x, y)}{\partial x}, & \text{при } x > \sin^3(\pi x), \\ 0, & \text{при } x = \sin^3(\pi x) \end{cases}$ $\lim_{a \rightarrow 0} (1 + a)^{\frac{1}{a}} = e, \quad (e \approx 2,71828)$
3	$e^{ x } = 1 + \frac{ x }{1!} + \frac{ x ^2}{2!} + \frac{ x ^3}{3!} + \dots, \quad -\infty < x < \infty$ $S = \begin{cases} \left \frac{\sqrt[3]{x-1}}{e^{-\varphi x}} \right , & \text{при } x \leq 0, \\ x, & \text{при } 0 < x < a^2 + 1' \\ 0, & \text{при } x \geq a^2 + 1 \end{cases}$
4	$D = \frac{\sum_{i=1}^N (x_i + \bar{x}_r)^2}{N}, \quad \sigma = \sqrt{D}$ $B = \begin{vmatrix} \beta_{11}^3 & \beta_{12} \\ \sqrt[4]{\beta_{21}} & \beta_{22} \end{vmatrix}$
5	$f(x) = a_0 + \sum_{n=1}^{\infty} \left(a_n \cos \frac{n\pi x}{L} + b_n \sin \frac{n\pi x}{L} \right)$ $B = \begin{vmatrix} b_{11}^3 & b_{12} \\ \sqrt[4]{b_{21}} & \left \frac{b_{22}}{18} \right \end{vmatrix}$
6	$f(x) = \begin{cases} -\sum_{i=1}^N x_i, & x < 0 \\ \sin^{-1} \frac{\pi x}{2}, & x \geq 0 \end{cases}$ $(x+a)^n = \sum_{k=0}^n \binom{n}{k} x^k a^{n-k}$

7	$A = \begin{pmatrix} \frac{a_{11}}{4} & a_{12} & a_{13} \\ a_{21} & a_{22} - 2 & a_{23} * 8 \\ a_{31}^2 & 1 & 0 \end{pmatrix}$ $f(x) = a_0 + \sum_{n=1}^{\infty} \left(a_n \cos \frac{n\pi x}{L} + b_n \sin \frac{n\pi x}{L} \right)$
8	$P(x) = \begin{cases} \sqrt[3]{x}, & \text{при } x < \cos^3(\alpha x), \\ \frac{\partial f(x, y)}{\partial x}, & \text{при } x > \cos^3(\alpha x) \\ \left x - \int_1^4 x^3 dx \right , & \text{при } x = \cos^3(\alpha x) \end{cases},$ $\lim_{a \rightarrow 0} (1 + a)^{\frac{1}{a}} = e, \quad (e \approx 2,71828)$
9	$C = \begin{pmatrix} \frac{c_{11}}{4} & c_{12} & c_{13} \\ c_{21} & c_{22} - 2 & c_{23} * 8 \\ c_{31}^2 & 0 & 5 \end{pmatrix}$ $F(x) = \int_a^{\infty} \frac{\sin^2(\pi x)}{\sum_{i=0}^n x_i} dx$
10	$\cos(x) = x - \frac{x^2}{2!} + \dots + (-1)^n \frac{x^{2n}}{(2n)!} + o(x^{2n-1}), \quad -\infty < x < \infty$ $S = \begin{cases} \left \frac{\sqrt[3]{x-1}}{e^{-\varphi x}} \right , & \text{при } x \leq 0, \\ x, & \text{при } 0 < x < a^2 + 1' \\ 0, & \text{при } x \geq a^2 + 1 \end{cases}$
11	$\sin(x) = x - \frac{x^3}{3!} + \dots + (-1)^{n-1} \frac{x^{2n-1}}{(2n-1)!} + o(x^{2n}), \quad -\infty < x < \infty$ $S = \begin{cases} \left \frac{\sqrt[3]{x-1}}{e^{-\varphi x}} \right , & \text{при } x \leq 0, \\ x, & \text{при } 0 < x < a^2 + 1' \\ 0, & \text{при } x \geq a^2 + 1 \end{cases}$

12	$f(x) = a_0 + \sum_{n=1}^{\infty} \left(a_n \cos \frac{n\pi x}{L} + b_n \sin \frac{n\pi x}{L} \right)$ $B = \left \begin{array}{cc} b_{11}^3 & b_{12} \\ \sqrt[4]{b_{21}} & \left \frac{b_{22}}{18} \right \end{array} \right $
13	$C = \begin{pmatrix} \frac{c_{11}}{4} & c_{12} & c_{13} \\ c_{21} & c_{22} - 2 & c_{23} * 8 \\ c_{31}^2 & 0 & 5 \end{pmatrix}$ $F(x) = \int_a^{\infty} \frac{\sin^2(\pi x)}{\sum_{i=0}^n x_i} dx$
14	$f(x) = \begin{cases} -\sum_{i=1}^N x_i, & x < 0 \\ \sin^{-1} \frac{\pi x}{2}, & x \geq 0 \end{cases}$ $(x+a)^n = \sum_{k=0}^n \binom{n}{k} x^k a^{n-k}$
15	$P(x) = \begin{cases} \sqrt[3]{x}, & \text{при } x < \cos^3(\alpha x), \\ \frac{\partial f(x,y)}{\partial x}, & \text{при } x > \cos^3(\alpha x) \\ \left x - \int_1^4 x^3 dx \right , & \text{при } x = \cos^3(\alpha x) \end{cases},$ $\lim_{a \rightarrow 0} (1+a)^{\frac{1}{a}} = e, \quad (e \approx 2,71828)$
16	$G(x) = \begin{cases} \sqrt[3]{x}, & \text{при } x < \sin^3(\pi x), \\ \frac{\partial f(x,y)}{\partial x}, & \text{при } x > \sin^3(\pi x), \\ 0, & \text{при } x = \sin^3(\pi x) \end{cases}$ $\lim_{a \rightarrow 0} (1+a)^{\frac{1}{a}} = e, \quad (e \approx 2,71828)$

17	$e^{ x } = 1 + \frac{ x }{1!} + \frac{ x ^2}{2!} + \frac{ x ^3}{3!} + \dots, \quad -\infty < x < \infty$ $S = \begin{cases} \left \frac{\sqrt[3]{x-1}}{e^{-\varphi x}} \right , & \text{при } x \leq 0, \\ x, & \text{при } 0 < x < a^2 + 1, \\ 0, & \text{при } x \geq a^2 + 1 \end{cases}$
18	$C = \begin{pmatrix} \frac{c_{11}}{4} & c_{12} & c_{13} \\ c_{21} & c_{22} - 2 & c_{23} * 8 \\ c_{31}^2 & 0 & 5 \end{pmatrix}$ $f(x) = \begin{cases} -\sum_{i=1}^N x_i, & x < 0 \\ \sin^{-1} \frac{\pi x}{2}, & x \geq 0 \end{cases}$
19	$\cos(x) = x - \frac{x^2}{2!} + \dots + (-1)^n \frac{x^{2n}}{(2n)!} + o(x^{2n-1}), \quad -\infty < x < \infty$ $S = \begin{cases} \left \frac{\sqrt[3]{x-1}}{e^{-\varphi x}} \right , & \text{при } x \leq 0, \\ x, & \text{при } 0 < x < a^2 + 1, \\ 0, & \text{при } x \geq a^2 + 1 \end{cases}$
20	$f(x) = \begin{cases} -\sum_{i=1}^N x_i, & x < 0 \\ \sin^{-1} \frac{\pi x}{2}, & x \geq 0 \end{cases}$ $(x+a)^n = \sum_{k=0}^n \binom{n}{k} x^k a^{n-k}$
21	$P(x) = \begin{cases} \sqrt[3]{x}, & \text{при } x < \cos^3(ax), \\ \frac{\partial f(x,y)}{\partial x}, & \text{при } x > \cos^3(ax) \\ \left x - \int_1^4 x^3 dx \right , & \text{при } x = \cos^3(ax) \end{cases},$ $\lim_{a \rightarrow 0} (1+a)^{\frac{1}{a}} = e, \quad (e \approx 2,71828)$

22	$P(x) = \begin{cases} \sqrt[3]{x}, & \text{при } x < \cos^3(ax), \\ \frac{\partial f(x, y)}{\partial x}, & \text{при } x > \cos^3(ax) \\ \left x - \int_1^4 x^3 dx \right , & \text{при } x = \cos^3(ax) \end{cases},$ $\lim_{a \rightarrow 0} (1 + a)^{\frac{1}{a}} = e, \quad (e \approx 2,71828)$
23	$C = \begin{pmatrix} \frac{c_{11}}{4} & c_{12} & c_{13} \\ c_{21} & c_{22} - 2 & c_{23} * 8 \\ c_{31}^2 & 0 & 5 \end{pmatrix}$ $F(x) = \int_a^\infty \frac{\sin^2(\pi x)}{\sum_{i=0}^n x_i} dx$
24	$\cos(x) = x - \frac{x^2}{2!} + \dots + (-1)^n \frac{x^{2n}}{(2n)!} + o(x^{2n-1}), \quad -\infty < x < \infty$ $S = \begin{cases} \left \frac{\sqrt[3]{x-1}}{e^{-\varphi x}} \right , & \text{при } x \leq 0, \\ x, & \text{при } 0 < x < a^2 + 1' \\ 0, & \text{при } x \geq a^2 + 1 \end{cases}$
25	$\sin(x) = x - \frac{x^3}{3!} + \dots + (-1)^{n-1} \frac{x^{2n-1}}{(2n-1)!} + o(x^{2n}), \quad -\infty < x < \infty$ $S = \begin{cases} \left \frac{\sqrt[3]{x-1}}{e^{-\varphi x}} \right , & \text{при } x \leq 0, \\ x, & \text{при } 0 < x < a^2 + 1' \\ 0, & \text{при } x \geq a^2 + 1 \end{cases}$