

1. Kreirajte tablicu

Ime	Datum	Formula
Newton	1687	$F = ma$
Einstein	1905	$E = mc^2$

2. Kreirajte:

$$\begin{array}{ll} \frac{d}{dx} \sin x = \cos x & \frac{d}{dx} e^x = e^x \\ \frac{d}{dx} \cos x = -\sin x & \frac{d}{dx} \log x = \frac{1}{x} \end{array}$$

3. Kreirajte

$$I = \int_0^\pi \sin t \, dt$$

što se lako izračuna

$$\begin{aligned} &= [-\cos t]_0^\pi \\ &= -\cos \pi + \cos 0 \\ &= 2 \end{aligned}$$

4. Kreirajte

$$y = \begin{cases} -1 & \text{ako } x < 0 \\ 0 & \text{ako } x = 0 \\ 1 & \text{ako } x > 0 \end{cases}$$

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Simbol zdesna je definiran u paketu **wasysym**.

5. Kreirajte

$$\mathbb{A} = \begin{pmatrix} a_{11} & a_{12} & \dots & a_{1n} \\ a_{21} & a_{22} & \dots & a_{2n} \\ \vdots & \vdots & \ddots & \vdots \\ a_{m1} & a_{m2} & \dots & a_{mn} \end{pmatrix}$$

6. Kreirajte $\varepsilon_{\text{mach}} \approx 2.2 \times 10^{-16}$

7. Kreirajte

$$\prod_{\substack{k \text{ paran} \\ k \neq i,j}} P_k = 1$$

8. Kreirajte

$$\overline{\lim}_{x \rightarrow 0} \frac{\sin x}{x} = 1$$

9. Kreirajte

$$\left(\prod_{j=1}^n \tilde{x}_j\right) H_C^{(\lambda)} = \frac{1}{2} \hat{k}_{ij} \det \widehat{\mathbf{K}}(i|i)$$

10. Kreirajte $f(x) \stackrel{\text{def}}{=} x^2 - 1$.

11. Kreirajte

$$\lim_{\varepsilon \rightarrow 0_+} \frac{\int_{a_i}^{a_{i+1}} \sqrt{1+(x-\mu)^2} dx}{\Phi(\varepsilon)} \qquad (\clubsuit)$$

12. Kreirajte

$$\overbrace{\vec{\alpha}_1 + \vec{\beta}_2}^{\text{gore}} - \underbrace{\overline{\mathbf{x}}^2 + \overline{\mathbf{y}}^2}_{\text{dolje}}$$

13. Kreirajte (pomoću paketa **amscd**)

$$\begin{array}{ccc} S^{\mathcal{W}_\Lambda} \otimes T & \xrightarrow{j} & T \\ \downarrow & & \downarrow \text{End } P \\ (S \otimes T)/I & \stackrel{=}{=} & (Z \otimes T)/J \end{array}$$