

1.  $C(n, r) = n! / (r!(n-r)!)$
2.  $\vec{x} \cdot \vec{y} = \langle \vec{x}, \vec{y} \rangle$ , právě když  $\vec{x} \perp \vec{y}$
3.  $(\forall x \in \mathbb{R})(\exists y \in \mathbb{R}) y > x$
4.  $\frac{a+b}{c}, \frac{a}{b+c}, \frac{1}{a+b+c} \neq \frac{1}{a} + \frac{1}{b} + \frac{1}{c}$
5.  $\nabla^2 f(x, y) = \frac{\partial^2 f}{\partial x^2} + \frac{\partial^2 f}{\partial y^2}$
6.  $\lim_{x \rightarrow 0} (1 + x^2)^{\frac{1}{x}} = e$
7.  $\int_0^1 3x^2 dx = 1, \int \frac{x+\sqrt{x}}{\sqrt[4]{x^2(1+\operatorname{tg} x)}} dx$
8.  $\sqrt{2}, \sqrt{\frac{x+y}{x-y}}, \sqrt[3]{10}, e^{\sqrt{x}}$
9.  $\|x\| = \sqrt{x \cdot x}$
10.  $\underline{x} \quad \bar{y} \quad \overline{x+y}$
11.  $\lim_{\alpha \rightarrow 0} \frac{\operatorname{tg} \alpha}{\alpha} = 1$
- 12.

$$\left\{ x \mid \int_0^x t^2 dt \leq 5 \right\}$$

Volitelné úkoly:

1.  $a \equiv c \pmod{\theta}$

- 2.

$$F(x)|_a^b = F(b) - F(a)$$

- 3.

$$\underbrace{\overbrace{a + \dots + a}^{(m-n)/2} + \underbrace{b + \dots + b}_n + \overbrace{a + \dots + a}^{(m-n)/2}}_m$$