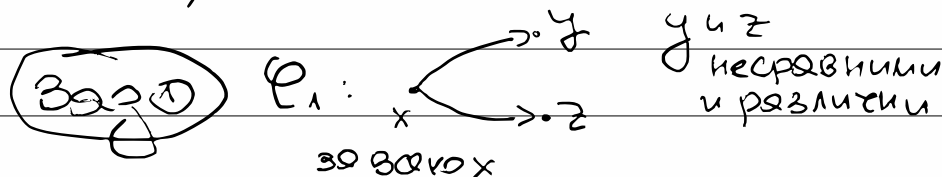


Е1, Вярност 1.

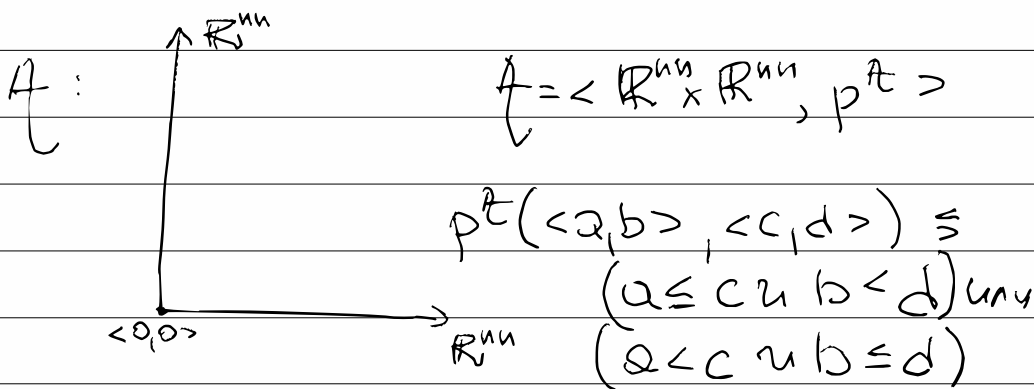


$$\varphi_2: p^A \neq \emptyset$$

$$\varphi_3: p^A \text{ е ирредуц.}$$

$$\varphi_4: \text{има най-малък елемент } p^A$$

$$\varphi_5: \text{густота}$$



$$\mathbb{R}^n \cong \mathbb{R} \setminus \mathbb{R}^-$$

Заг 2  $f \equiv \langle \mathbb{R}^n; f^A \rangle, f^A(a, b) \equiv a^b + 1$

а)  $\{x \in \mathbb{R} \mid 0 \leq x < 1\}$

$$\varphi_{[0,1)}(x) \equiv \neg \exists y \exists z (f(y, z) \equiv x)$$

$$b) \varphi_0(x) \equiv \exists y \forall z (f(z, x) \doteq y). // z^0 + 1 = y$$

c) ескалар от  $\forall$  и  $\exists$   $n \in \mathbb{N}$ .

$$\varphi_1(x) \equiv \exists y \forall z (f(x, z) \doteq y). // 1^z + 1 = y$$

$$\varphi_{n+1}(x, y) \equiv \exists z (\varphi_n(z) \& f(x, z) \doteq y).$$

При  $\varphi_n(x)$  дефинираме

$$\varphi_{n+1}(x) \equiv \exists y (\varphi_n(y) \& \varphi_{n+1}(y, x)).$$

d) Не е необходимо едно непрекъснато и-в в интервала  $(1, \sqrt{2})$  от  $\forall$  и  $\exists$ .

(3223)

$$\varphi_1 \equiv \forall x \exists y (r(x, x) \& r(x, \varphi(x, y)))$$

$$\varphi_2 \equiv \forall z \forall x (\exists y (r(x, y) \& r(y, z)) \Rightarrow r(z, x)).$$

$$\varphi_3 \equiv \forall x \forall y (\exists z (r(x, z) \& r(z, y)) \Rightarrow (p(x) \& p(y)))$$

$$\varphi_4 \equiv \exists x (p(x) \& \forall y (r(\varphi(x, y), x) \Rightarrow r(\varphi(y, x), x)))$$

Показател  $\varphi_1, \varphi_2, \varphi_3, \varphi_4$  е неувеличаван и-в.

Винаги кк ПУ от 25 януари 2022.