

$$a \cdot b = 0 \Rightarrow a = 0 \vee b = 0$$

$$1) a = 0 \quad \text{řada}$$

$$2) a \neq 0 \quad \Downarrow \quad a^{-1} = \frac{1}{a}$$

$$0 = \frac{1}{a} (a \cdot b) = \left( \frac{1}{a} \cdot a \right) \cdot b = b$$

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$$a \cdot 0 \stackrel{?}{=} 0 \quad 0 + 0 = 0$$

$$a \cdot 0 = a \cdot (0 + 0) = a \cdot 0 + a \cdot 0 \quad | - a \cdot 0$$

$$\underline{\underline{0 = a \cdot 0}}$$

$$\boxed{ax = ay} \quad \& \quad a \neq 0 \implies x = y$$

$$a \in \mathbb{K} - \{0\} \quad \Downarrow \quad \frac{1}{a}$$

$$\frac{1}{a}(ax) = \frac{1}{a}(ay)$$

$$\begin{aligned} \left(\frac{1}{a}a\right)x &= \left(\frac{1}{a}a\right)y \implies x = y \\ \downarrow & \quad \downarrow \\ x &= y \end{aligned}$$

$$a x = b x, \quad x \neq 0 \implies a = b$$

$$a x - b x = b x - b x = 0$$

$$(a - b) x = 0$$

1)  $a = b$  je a.

2)  $a \neq b$   $a - b \neq 0$

$$x = \frac{0}{a-b}$$

$$x = 0$$

SPOR

$L \cap K$

$L \cap \text{ker } \nu \cap \text{ker } \mu \cap K$

$x, y \in L$

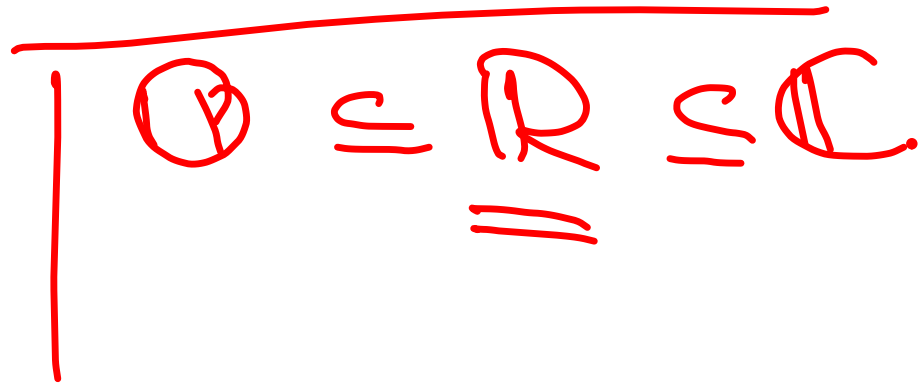
$\Rightarrow$

$x + y \in K$

$R \cap K, x \in L$

$R \cdot x \in L$

$\in K \quad \in K$



$$L \supseteq K$$
$$L \text{ je VP mod } K$$
$$x, y \in L \implies$$
$$x + y \in L$$
$$x \in K, x \in L$$
$$x \cdot y \in L$$
$$x \in K, x \in L$$
$$\boxed{\mathbb{Q} \subseteq \mathbb{R} \subseteq \mathbb{C}}$$

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$$\begin{matrix}
 & \begin{pmatrix} 1 & 2 & 3 \\ 4 & 5 & 6 \end{pmatrix} = A \\
 A^T = & \begin{pmatrix} 1 & 2 \\ 3 & 4 \\ 5 & 6 \end{pmatrix} \\
 & A^T = A
 \end{matrix}$$

$$\begin{pmatrix} 1 & 2 & 3 \\ 4 & 5 & 6 \end{pmatrix} \rightarrow \begin{pmatrix} 1 & 2 & 3 & 4 & 5 & 6 \end{pmatrix}$$

$$x \cdot (c \delta) = c (x \cdot \delta)$$

$$\sum_i x_i (c \delta_i) = c \sum_i x_i \delta_i$$