(7)

FÁBIÁN TÍMEA NIKOLETT

RDDZXA

$$H = \left\{ \frac{x^2+9}{3x^2+9} : x \in (-\infty, 3) \right\}$$

$$\frac{x^2+9}{3x^2+9} \leq \frac{0^2+9}{3\cdot 0^2+9} = \frac{9}{9} = 1 \qquad (x \in (-\infty, 3))$$

$$\Rightarrow \sup(H) = \max(H) = 1$$

$$x^2+9 > 0$$

$$3x^2+9 > 0 \quad \Rightarrow \quad \frac{x^2+9}{3x^2+9} \text{ sosem lesz negatív}$$

$$\Rightarrow \inf(H) = 0$$