Pro $a, b \in \mathbb{R}$, b > 1 definujeme:

$$\Rightarrow a + \infty = \infty$$
.

$$\infty \cdot \infty = \infty$$

$$\frac{a}{\pm\infty}=0$$
,

$$\rightarrow a - \infty = -\infty$$

$$b^{\infty}=\infty$$
,

$$\rightarrow \infty + \infty = \infty$$

$$ightharpoonup \infty + \infty = \infty,$$
 $ightharpoonup \infty \cdot (-\infty) = -\infty,$ $ightharpoonup b^{-\infty} = 0,$

$$b^{-\infty}=0$$

$$\blacktriangleright -\infty -\infty = -\infty$$
, $\blacktriangleright |\pm \infty| = \infty$, $\blacktriangleright \log_b \infty = \infty$.

$$|\pm\infty|=\infty$$

$$\log_b \infty = \infty.$$

- ▶ Je-li a > 0, pak $a \cdot \infty = \infty$, $a \cdot (-\infty) = -\infty$.
- ▶ Je-li a < 0, pak $a \cdot \infty = -\infty$, $a \cdot (-\infty) = \infty$.
 - ightharpoonup není definováno pro žádné $a \in \mathbb{R}$.

$$\left\| \infty - \infty \right\| \,, \ \left\| \pm \infty \cdot 0 \right\| \,, \ \left\| \frac{0}{0} \right\| \,, \quad \left\| \frac{\pm \infty}{\pm \infty} \right\| \,, \quad \left\| \mathbf{1}^{\infty} \right\| \,, \quad \left\| \infty^{0} \right\| \,, \quad \left\| \mathbf{0}^{0} \right\| \,.$$

Pro $a, b \in \mathbb{R}, b > 1$ definujeme:

$$ightharpoonup a+\infty=\infty$$
,

$$ightharpoonup \infty \cdot \infty = \infty$$
,

$$\frac{a}{+\infty}=0$$
,

$$ightharpoonup$$
 $a-\infty=-\infty$

$$ightharpoonup a-\infty=-\infty, \qquad
ightharpoonup (-\infty)\cdot (-\infty)=\infty,$$

$$b^{\infty}=\infty$$
.

$$\triangleright \infty + \infty = \infty$$

$$\blacktriangleright$$
 $\infty + \infty = \infty$, \blacktriangleright $(-\infty) = -\infty$, \blacktriangleright $b^{-\infty} = 0$,

$$b^{-\infty}=0$$

$$\blacktriangleright$$
 $-\infty - \infty = -\infty$, \blacktriangleright $|\pm \infty| = \infty$, \blacktriangleright $\log_b \infty = \infty$.

$$|\pm\infty|=\infty$$
,

▶
$$\log_b \infty = \infty$$

- ▶ Je-li a > 0, pak $a \cdot \infty = \infty$, $a \cdot (-\infty) = -\infty$.
- ▶ Je-li a < 0, pak $a \cdot \infty = -\infty$, $a \cdot (-\infty) = \infty$.
 - ightharpoonup není definováno pro žádné $a\in\mathbb{R}.$

$$\left\| \infty - \infty \right\| \,, \ \left\| \pm \infty \cdot 0 \right\| \,, \ \left\| \frac{0}{0} \right\| \,, \ \left\| \frac{\pm \infty}{\pm \infty} \right\| \,, \ \left\| 1^{\infty} \right\| \,, \ \left\| \infty^0 \right\| \,, \ \left\| 0^0 \right\| \,.$$