

$$\star x, y \in \mathbb{R}$$

$$2a) x \neq 0 \wedge y \neq 0$$

" $x \neq 0$ and $y \neq 0$ "

$$b) xy \neq 0$$

" xy times y not equal to zero"

$$c) xy \neq 0 \Rightarrow x \neq 0 \wedge y \neq 0$$

"if $xy \neq 0$ then $x \neq 0$ and $y \neq 0$ "

$$d) xy = 0 \Rightarrow x = 0 \vee y = 0$$

"if $xy = 0$ then $x = 0$ and $y = 0$ "

$$e) x = 0 \vee y = 0 \equiv xy = 0$$

" $x = 0$ or $y = 0$ is equal to $x \cdot y = 0$ "