Funzioni Iperboliche

giovedì 19 ottobre 2023 17:31

Funzioni Iperboliche

Per ogni numero reale x si definiscono

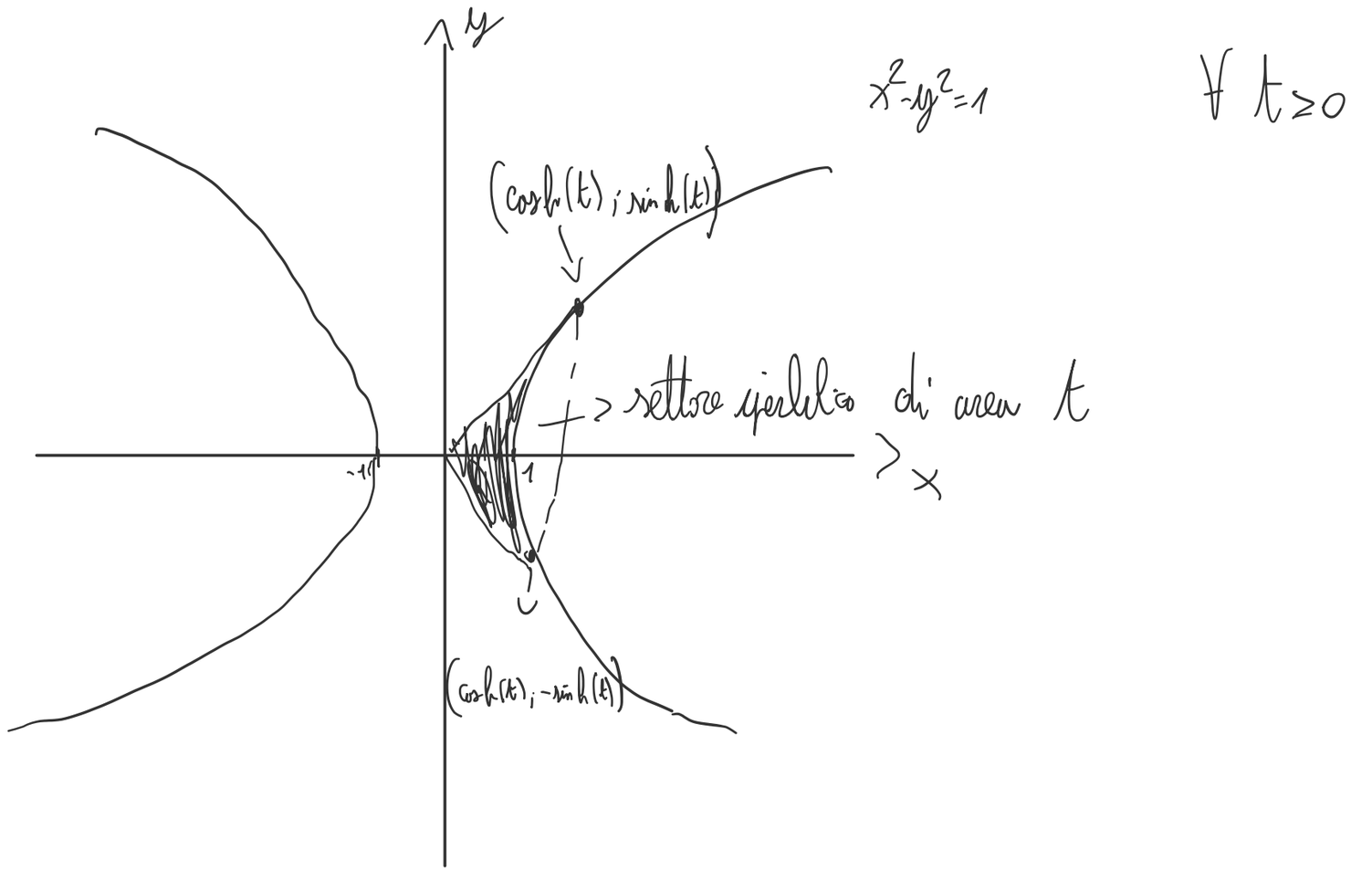
- $\sinh(x)\ Sh(x) = \frac{e^x - e^{-x}}{2}$

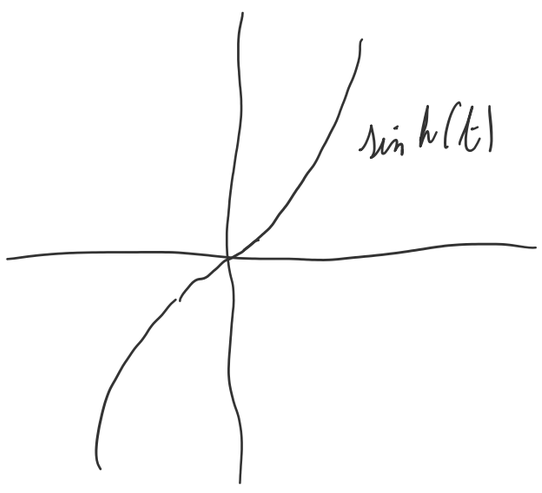
- $\cosh(x) = Ch(x) = \frac{e^x + e^{-x}}{2}$

- $tgh(x) = Th(x) = \frac{\sinh(x)}{\cosh(x)} = \frac{e^x - e^{-x}}{e^x + e^{-x}} = \frac{e^{2x}-1}{e^{2x}+1}$

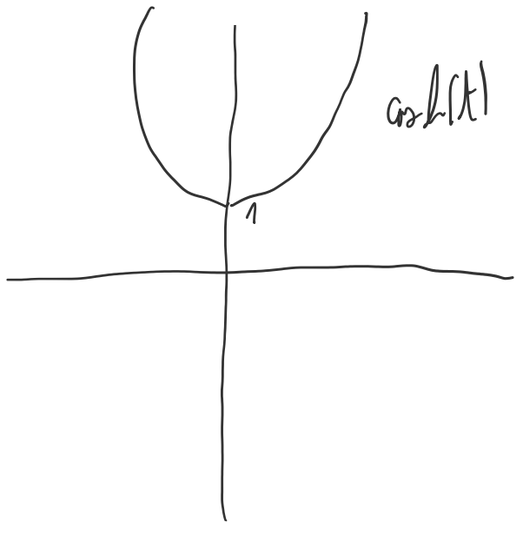
$\forall x \in \mathbb{R}$ vale:

$\cosh^2(t) - \sinh^2(t) = 1$





funzione dispari



funzione pari