

$$y = \frac{1}{1-x^2}$$

$$\lim_{x \rightarrow \infty} y = 0$$

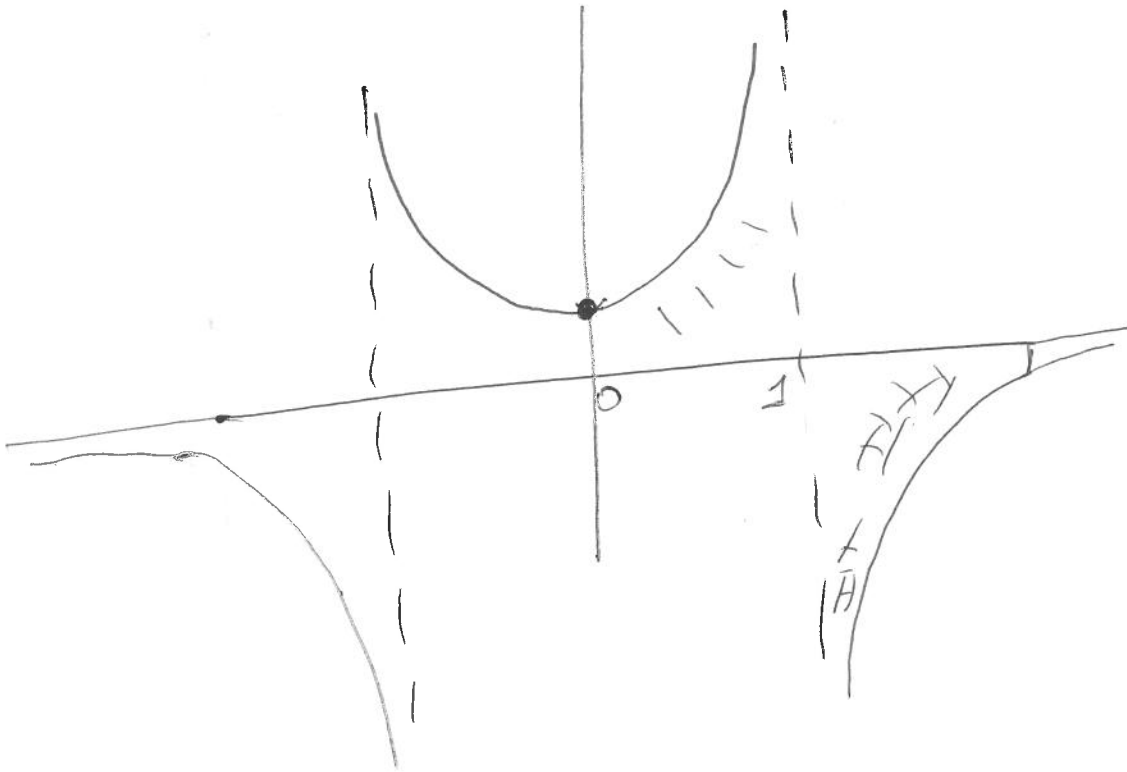
$$\lim_{x \rightarrow -\infty} y = 0$$


$$\lim_{x \rightarrow 1^+} y = -\infty$$

$$\lim_{x \rightarrow 1^-} y = +\infty$$



$$\lim_{x \rightarrow -1^+} y = +\infty$$

$$\lim_{x \rightarrow -1^-} y = -\infty$$



The area  is  $+\infty$

The area  is also  $+\infty$

The integral is set up to compute the area  minus the area 

The integral does not have a finite value