

7. (10 pts.) Very carefully sketch the graph of the equation $y^2 - x^2 = 1$ below.

tr-t4g7.pdf

Asymptotes!

$$y^2 - x^2 = 0$$

$$\Leftrightarrow (y-x)(y+x) = 0$$

$$\Leftrightarrow y = x \text{ or } y = -x$$

Vertices! $(0, 1)$
 $(0, -1)$

