

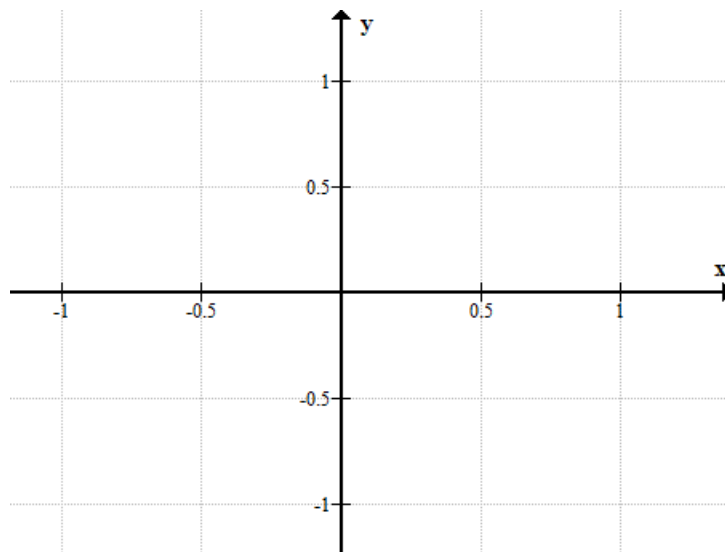
1. Sketch the curve defined by the parametric equations

$$x = \sin(t), \quad y = \frac{t}{\pi}, \quad -\pi \leq t \leq \pi$$

by using 5 t -values. Start at $t = -\pi$ and increase by $\pi/2$. Note the direction of the curve using small arrows.

- (a) Make a T -table.

- (b) Sketch



(c) Find $\frac{dy}{dx}$. Then find the slope at $t = \pi/3$.

(d) Find all horizontal and vertical tangents.