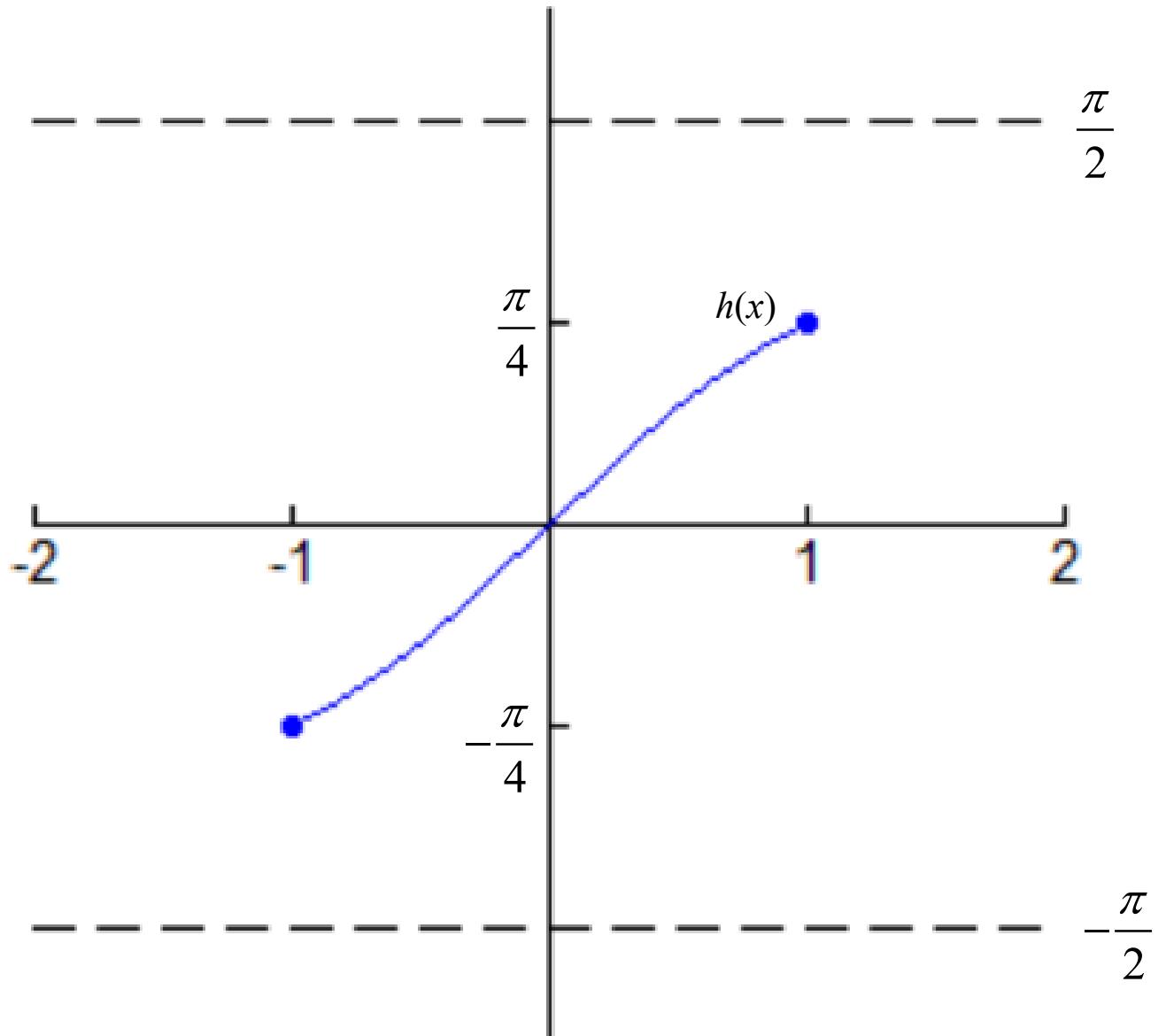


$$h(x) = x - \frac{x}{3} + \frac{x}{5} - \frac{x}{7} + \frac{x}{9} - \frac{x}{11} + \dots = \tan^{-1} x \text{ on } -1 \leq x \leq 1$$

Notice the *odd* symmetry (about the *origin*)



### Fun Facts:

$$\frac{\pi}{4} = 1 - \frac{1}{3} + \frac{1}{5} - \frac{1}{7} + \frac{1}{9} - \frac{1}{11} + \dots = \tan^{-1}(1)$$

$$-\frac{\pi}{4} = -1 + \frac{1}{3} - \frac{1}{5} + \frac{1}{7} - \frac{1}{9} + \frac{1}{11} - \dots = \tan^{-1}(-1)$$