

Pre-Calculus
Sec. 4.6
Graphs of Tangent
with
Vertical & Horizontal
Stretching & Shrinking

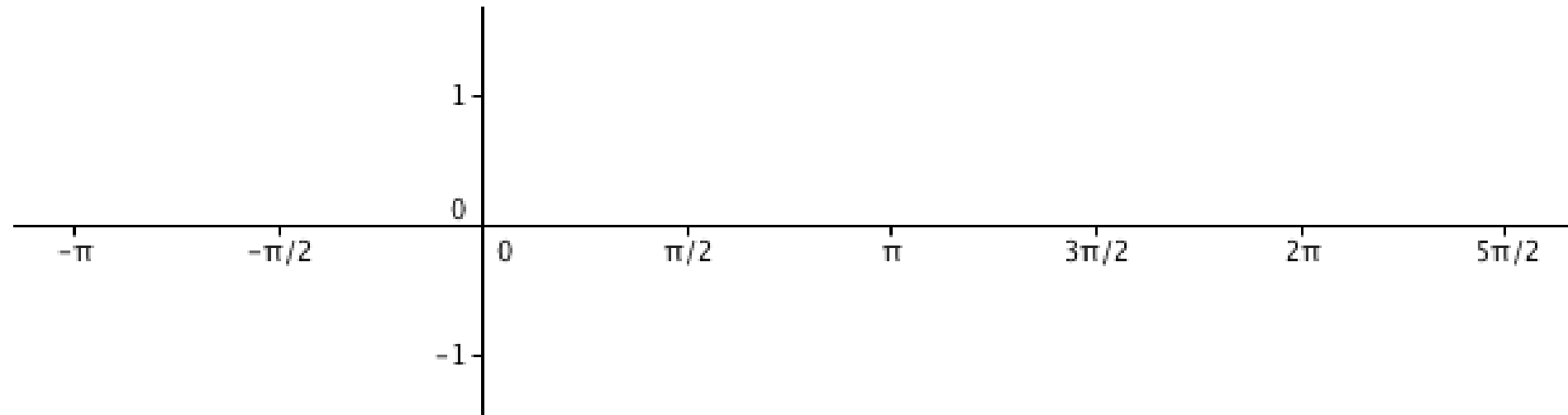
The Graph of $f(x) = \tan x$

Domain:

Range:

Period:

The distance btwn 2 consecutive asymptotes.



This graph has _____ symmetry, and is an _____ function.

Ex.1: Graph

$$y = 2 \tan \frac{x}{4}$$

Amplitude: Not defined.

Period: $\frac{\pi}{|b|}$

Phase Shift:



Ex.2: Graph

$$y = -3 \tan 4x$$

Amplitude: Not defined.

Period: $\frac{\pi}{|b|}$

Phase Shift:



Ex.3: Graph $f(x) = -\frac{1}{5} \tan \frac{\pi x}{3}$

Amplitude: Not defined.

Period: $\frac{\pi}{|b|}$

Phase Shift:

