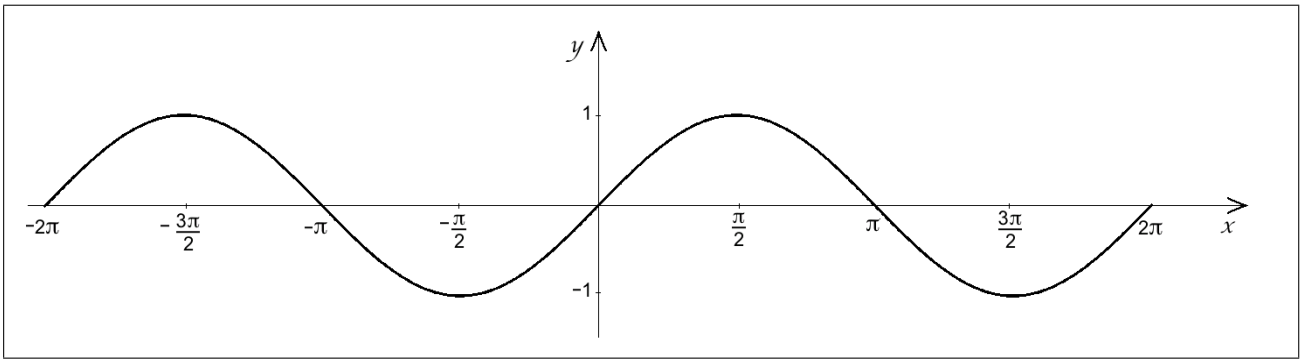
$$\boxed{f(x) = \sin x}$$

domain: $\mathbb{R}$
range: $[-1, 1]$

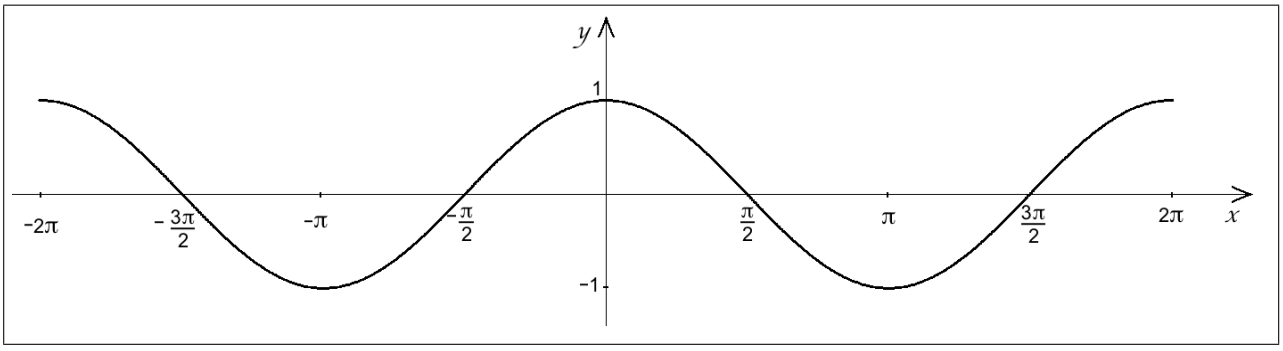
periodic with period 2π: for all x, $\sin(x + 2\pi) = \sin x$
odd function: for all x, $\sin(-x) = -\sin x$



$$\boxed{f(x) = \cos x}$$

domain: $\mathbb{R}$
range: $[-1, 1]$

periodic with period 2π: for all x, $\cos(x + 2\pi) = \cos x$
even function: for all x, $\cos(-x) = \cos x$



$$f(x) = \tan x = \frac{\sin x}{\cos x}$$

domain: $x \neq \frac{\pi}{2} + k\pi$ where $k \in \mathbb{Z}$

vertical asymptotes at $x = \frac{\pi}{2} + k\pi$ where $k \in \mathbb{Z}$

range: $\mathbb{R}$

periodic with period π: for all x, $\tan(x + \pi) = \tan x$

odd function: for all x, $\tan(-x) = -\tan x$