Trigonometric Functions

Sine Function: f(x) = sin x

$y = \sin(x)$
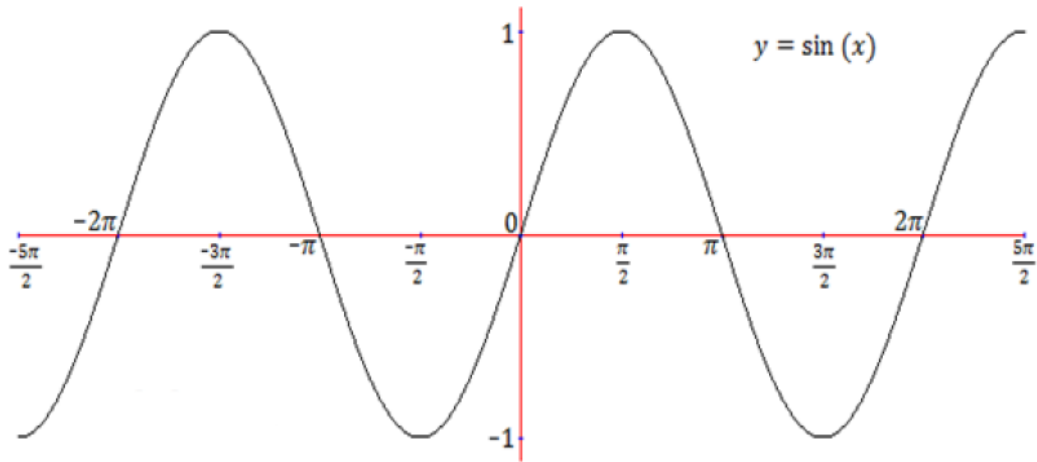
Domain: All real numbers

Range: $-1 \le x \le 1$

X – Intercept: $k\pi$, where k is an integer

Y – Intercept: 0

Period: 2π

Amplitude: 1

Cosine Function: f(x) = cos x

$y = \cos(x)$
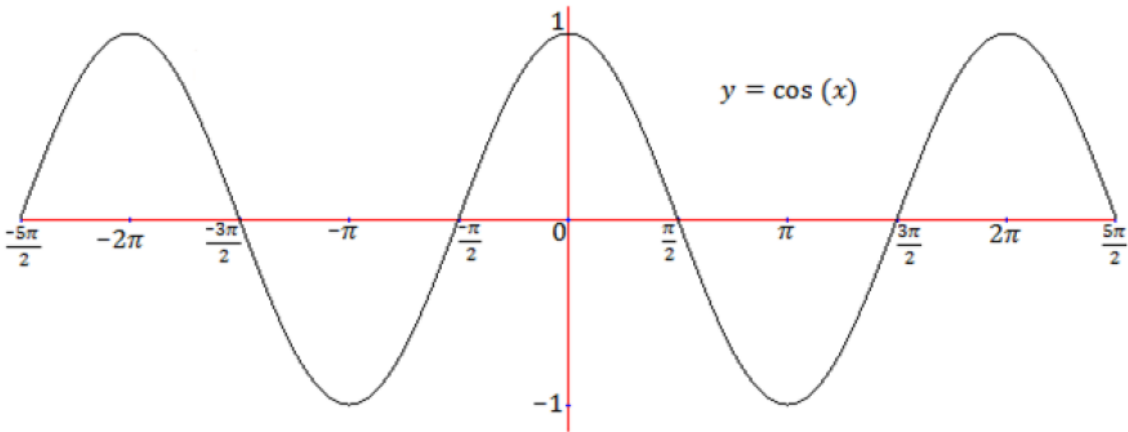
Domain: All real numbers

Range: $-1 \le x \le 1$

X – Intercept: $k\pi/2$, where k is an integer

Y – Intercept: 1

Period: 2π

Amplitude: 1

Trigonometric Functions

Tangent Function: f(x) = tan x

$y = \tan(x)$
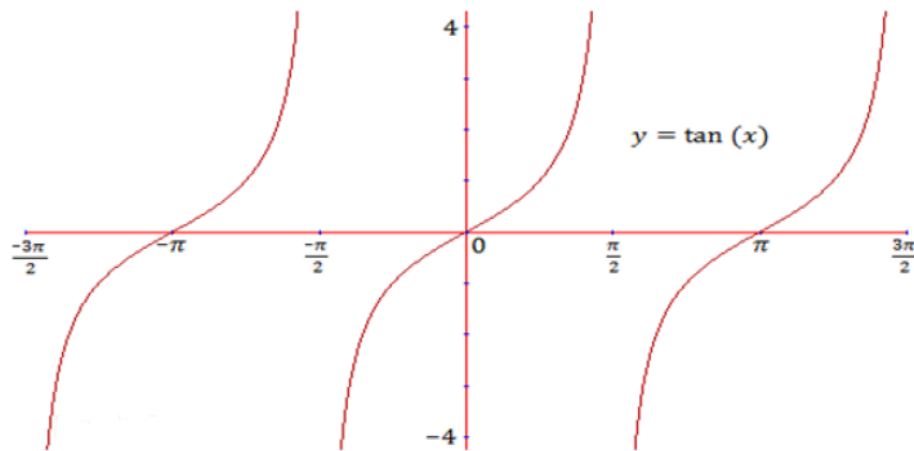
Domain: All real numbers except π/2 + k, where k is an integer
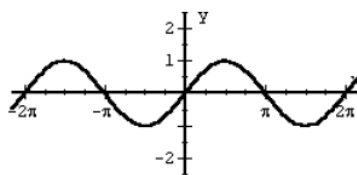
Range: All real numbers

X-Intercept: (kπ, 0) where k is an integer

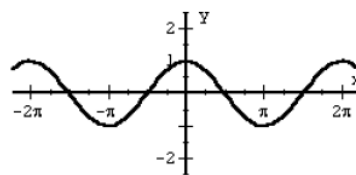**Y-Intercept**: (0, 0)
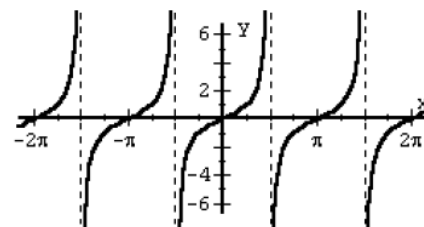
Period: π

Amplitude: Does not exist

Vertical asymptotes at π/2 + kπ, where k is an integer)

$f(x) = \sin x$ $f(x) = \cos x$ $f(x) = \tan x$

Trigonometric Functions