

TRIGONOMETRIC FUNCTIONS REFERENCE

Standard Form: $y = A \sin(B(x - C)) + D$

Sine $y = \sin(x)$

Domain: $(-\infty, \infty)$

Range: $[-1, 1]$

Period: 2π

Amplitude: 1

Cosine $y = \cos(x)$

Domain: $(-\infty, \infty)$

Range: $[-1, 1]$

Period: 2π

Amplitude: 1

Tangent $y = \tan(x)$

Domain: $x \neq \pi/2 + n\pi$

Range: $(-\infty, \infty)$

Period: π

Vertical Asymp: $x = \pi/2$

Cosecant $y = \csc(x)$

Domain: $x \neq n\pi$

Range: $(-\infty, -1] \cup [1, \infty)$

Period: 2π

Vertical Asymp: $x = n\pi$

A = Amplitude | P = $2\pi/B$ (Period) | C = Phase Shift | D = Vertical Shift