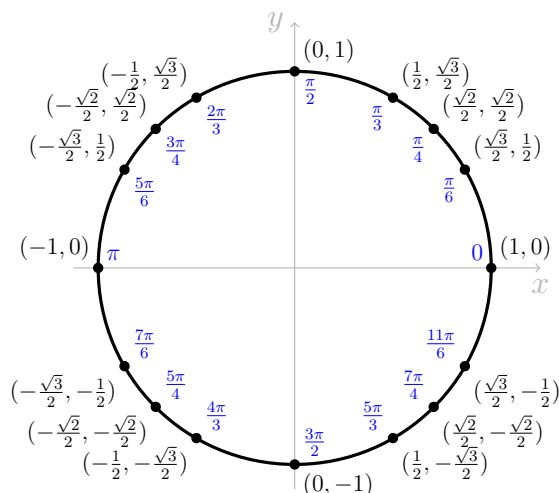


Formula Sheet

Quadratic Formula

- $$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

Common Angles



Obscure Trigonometry Ratios

- $$\cot x = \frac{\cos x}{\sin x}$$
- $$\csc x = \frac{1}{\sin x}$$

Trigonometry Limits

- $$\lim_{x \rightarrow 0} \frac{\sin x}{x} = 1$$
- $$\lim_{x \rightarrow 0} \frac{1 - \cos x}{x} = 0$$

Selected Derivatives

- $$\frac{d}{dx} \tan x = \sec^2 x,$$
- $$\frac{d}{dx} \sec x = \sec x \tan x$$

Linear Approximation

- $$L(x) = f(a) + f'(a)(x - a)$$

Summation Formulas

- $$\sum_{i=1}^n i = \frac{n(n+1)}{2}$$
- $$\sum_{i=1}^n i^2 = \frac{n(n+1)(2n+1)}{6}$$

Riemann Sum

- $$A = \lim_{n \rightarrow \infty} \sum_{i=1}^n f(x_i) \Delta x$$