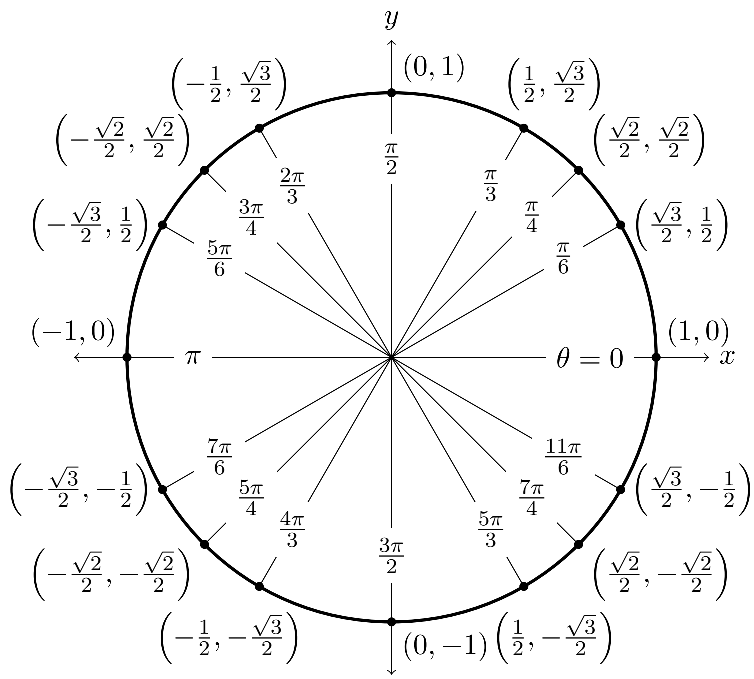
FOR REFERENCE, NO QUESTION ON THIS PAGE

Unit circle: The coordinates of the endpoints satisfy $(x, y) = (\cos\theta, \sin\theta)$, where θ is the corresponding angle.



Common Maclaurin series:

$\frac{1}{1-x} = \sum_{n=0}^{\infty} x^n,$	$R = 1$
$e^x = \sum_{n=0}^{\infty} \frac{x^n}{n!},$	$R = \infty$
$\sin x = \sum_{n=0}^{\infty} (-1)^n \frac{x^{2n+1}}{(2n+1)!},$	$R = \infty$
$\cos x = \sum_{n=0}^{\infty} (-1)^n \frac{x^{2n}}{(2n)!},$	$R = \infty$
$\tan^{-1} x = \sum_{n=0}^{\infty} (-1)^n \frac{x^{2n+1}}{2n+1},$	$R = 1$
$\ln(1+x) = \sum_{n=1}^{\infty} (-1)^{n-1} \frac{x^n}{n},$	$R + 1$

Formulas for a parametric curve:

$x = f(t), y = g(t)$

Arc length from $t = a$ to $t = b$:

$$\int_a^b \sqrt{(f'(t))^2 + (g'(t))^2}dt$$

Area under the curve from $t = a$ to $t = b$

$$\int_a^b g(t)f'(t)dt \qquad \left[\text{ or } \int_b^a g(t)f'(t)dt\right]$$

Formulas for a polar curve:

$r = f(\theta)$

Arc length from $\theta = a$ to $\theta = b$:

$$\int_a^b \sqrt{(f(\theta))^2 + (f'(\theta))^2}d\theta$$

Area bounded by the curve and the rays $\theta = a, \theta = b$:

$$\int_a^b \frac{1}{2}(f(\theta))^2 d\theta$$