

Identidades trigonométricas habituales:

$$\sin(x) = \cos\left(x - \frac{\pi}{2}\right)$$

$$\cos x \cdot \cos y = \frac{1}{2} \cdot \cos(x + y) + \frac{1}{2} \cos(x - y)$$

$$\sin x \cdot \sin y = -\frac{1}{2} \cdot \cos(x + y) + \frac{1}{2} \cos(x - y)$$

$$\sin x \cdot \cos y = \frac{1}{2} \cdot \sin(x + y) + \frac{1}{2} \sin(x - y)$$

$$\cos x \cdot \sin y = \frac{1}{2} \cdot \sin(x + y) - \frac{1}{2} \sin(x - y)$$

$$\sin(x \pm y) = \sin x \cdot \cos y \pm \cos x \cdot \sin y$$

$$\cos(x \pm y) = \cos x \cdot \cos y \mp \sin x \cdot \sin y$$

$$\sin^2 x + \cos^2 x = 1$$

$$\cos^2 x = \frac{1}{2}(1 + \cos 2x)$$

$$\sin^2 x = \frac{1}{2}(1 - \cos 2x)$$

$$\sin 2x = 2 \cdot \sin x \cdot \cos x$$

$$\cos 2x = \cos^2 x - \sin^2 x$$

$$\sin x = \frac{e^{jx} - e^{-jx}}{2 \cdot j}$$

$$\cos x = \frac{e^{jx} + e^{-jx}}{2}$$

Propiedades de los logaritmos:

$$\log_b x = p \Leftrightarrow b^p = x$$

$$\log_b(x \cdot y) = \log_b x + \log_b y$$

$$\log_b\left(\frac{x}{y}\right) = \log_b x - \log_b y$$

$$\log_b(x^p) = p \cdot \log_b x$$

$$\log_b x = \frac{\log_y x}{\log_y b}$$

Números complejos:

$$z = x + j \cdot y = \operatorname{Re}(z) + j \cdot \operatorname{Im}(z) = +\sqrt{x^2 + y^2} \cdot e^{j \arctan \frac{y}{x}} = |z| \cdot e^{j \arg(z)}$$

$$z^* = \operatorname{Re}(z) - j \cdot \operatorname{Im}(z) = |z| \cdot e^{-j \cdot \arg(z)}$$

$$\operatorname{Re}(z) = \frac{z + z^*}{2}$$

$$\operatorname{Im}(z) = \frac{z - z^*}{2}$$

$$|z| = +\sqrt{z \cdot z^*}$$

Prefijos multiplicativos recomendados para las unidades:

<i>Factor multiplicativo</i>	<i>Prefijo</i>	<i>Símbolo</i>
10^{12}	tera	T
10^9	giga	G
10^6	mega	M
10^3	kilo	K (k)
10^{-3}	mili	m
10^{-6}	micro	μ
10^{-9}	nano	n
10^{-12}	pico	p