Cartesian form	$a+bi$
Conjugate	$z=a+bi \rightarrow \bar{z}=a-bi$
Modulus	$\|z\|=\sqrt{a^2+b^2}$
Argument	$\alpha=\arctan\left(\frac{b}{a}\right)$
Polar form	$\|z\|_\alpha$
Trigonometric form	$\|z\|\cdot(\cos\alpha+i\cdot\sin\alpha)=\|z\|\operatorname{cis}\alpha$
Exponential form	$\|z\|\cdot e^{i\alpha}=\|z\|(\cos\alpha+i\cdot\sin\alpha)$
Polar to cartesian conversion	$\left.\begin{array}{l}\mathrm{Re}=a=\|z\|\cos\alpha\\ \mathrm{Im}=b=\|z\|\sin\alpha\end{array}\right\} \rightarrow \|z\|\cdot(\cos\alpha+i\cdot\sin\alpha)=a+bi$
Addition in cartesian form	$(a+bi)+(c+di)=(a+c)+(b+d)i$
Subtraction in cartesian form	$(a+bi)-(c+di)=(a-c)+(b-d)i$
Multiplication in cartesian form	$(a+bi)\cdot(c+di)=(ac-bd)+(ad+bc)i$
Division in cartesian form	$\frac{a+bi}{c+di}=\frac{(a+bi)\cdot(c-di)}{(c+di)\cdot(c-di)}=\frac{(ac+bd)+(bc-ad)i}{c^2+d^2}$
Multiplication in polar form	$\|z\|_\alpha\cdot\|w\|_\beta=\|z\cdot w\|_{\alpha+\beta}$
Division in polar form	$\frac{\|z\|_\alpha}{\|w\|_\beta}=\left\|\frac{z}{w}\right\|_{\alpha-\beta}$
Power in polar form	$(\|z\|_\alpha)^n=\|z^n\|_{\alpha\cdot n}$
n-th root in polar form	$\sqrt[n]{\|z\|_\alpha}=\left(\sqrt[n]{\|z\|}\right)_{\frac{\alpha+k\cdot 360°}{n}}$ $k=0,\ 1,\ 2,\ \ldots,\ n-1$
de Moivre's formula	$(\cos\alpha+i\cdot\sin\alpha)^n=\cos(n\alpha)+i\cdot\sin(n\alpha)$
Euler's formula	$e^{ix}=\cos x+i\cdot\sin x$
Euler's identity	$e^{i\pi}+1=0$