Algebraic Form	Complex number	$z = a + bi$	
	Conjugate	$\bar{z} = a - bi$	
	Symmetry	$-z = -a - bi$	
	Equality	$a + bi = c + di \Leftrightarrow a = c \wedge b = d$	
	Addition	$(a + bi) + (c + di) = (a + c) + (b + d)i$	
	Subtraction	$(a + bi) - (c + di) = (a - c) + (b - d)i$	
	Multiplication	$(a + bi) \times (c + di) = (ac - bd) + (ad + bc)i$	
	Division	$\frac{a+bi}{c+di} = \frac{a+bi}{c+di} \times \frac{c-di}{c-di} = \frac{ac+bd}{c^2+d^2} + \frac{bc-ad}{c^2+d^2}i$	
	Inverse	$z^{-1} = \frac{1}{z}$	$z^{-1} = \frac{1}{\lvert z\rvert^2}. \bar{z}$
	Properties	$\bar{\bar{z}} = z$	
		$\lvert z\rvert = \lvert\bar{z}\rvert$	
		$\lvert z\rvert^2 = z. \bar{z}$	
		$Re(z) = \frac{z + \bar{z}}{2}$	
		$Im(z) = \frac{z - \bar{z}}{2i}$	
Exponential to Algebraic form conversion	Angle	$arg(z) = \theta$	$\theta = \tan^{-1}\left(\frac{b}{a}\right)$
	Distance	$\lvert z\rvert$	$\lvert z\rvert = \sqrt{a^2 + b^2}$
Exponential form	Complex number	$z = \lvert z\rvert. e^{i\theta}$	$z = \lvert z\rvert. (\cos\theta + i\sin\theta)$
	Conjugate	$\bar{z} = \lvert z\rvert. e^{i(-\theta)}$	
	Symmetry	$-z = \lvert z\rvert. e^{i(\theta+\pi)}$	
	Multiplication	$z_1 = \lvert z_1\rvert. e^{i\theta_1}$, $z_2 = \lvert z_2\rvert. e^{i\theta_2}$	$z_1 \times z_2 = \lvert z_1\rvert\lvert z_2\rvert. e^{i(\theta_1+\theta_2)}$
	Division		$\frac{z_1}{z_2} = \frac{\lvert z_1\rvert}{\lvert z_2\rvert}. e^{i(\theta_1-\theta_2)}$
	Exponentiation	$z^n = \lvert z\rvert^n. e^{in\theta}$	
	Radicals	$\sqrt[n]{\lvert z\rvert. e^{i\theta}} = \sqrt[n]{\lvert z\rvert}. e^{i\left(\frac{\theta+2k\pi}{n}\right)}, k \in \{0, ..., n-1), n \in \mathbb{N}$	