

$$|z_1 \pm z_2| \leq |z_1| + |z_2|$$

$$|z_1 \pm z_2| \geq ||z_1| - |z_2||$$

$$\sin z = \frac{e^{iz} - e^{-iz}}{2i}$$

$$\cos z = \frac{e^{iz} + e^{-iz}}{2}$$

$$\sin z = \sin x \cosh y + i \cos x \sinh y$$

$$|\sin z|^2 = \sin^2 x + \sinh^2 y$$

$$\cos z = \cos x \cosh y - i \sin x \sinh y$$

$$|\cos z|^2 = \cos^2 x + \sinh^2 y$$

$$\sin(z_1 + z_2) = \sin z_1 \cos z_2 + \cos z_1 \sin z_2$$

$$\cos(z_1 + z_2) = \cos z_1 \cos z_2 - \sin z_1 \sin z_2$$

$$\sin(iz) = i \sinh z$$

$$\sinh(iz) = i \sin z$$

$$\cos(iz) = \cosh z$$

$$\cosh(iz) = \cos z$$

$$\sinh z = \frac{e^z - e^{-z}}{2}$$

$$\cosh z = \frac{e^z + e^{-z}}{2}$$

$$\cosh^2 z - \sinh^2 z = 1$$

$$\sinh z = \sinh x \cos y + i \cosh x \sin y$$

$$|\sinh z|^2 = \sinh^2 x + \sin^2 y$$

$$\cosh z = \cosh x \cos y + i \sinh x \sin y$$

$$|\cosh z|^2 = \sinh^2 x + \cos^2 y$$

$$\sinh(z_1 + z_2) = \sinh z_1 \cosh z_2 + \cosh z_1 \sinh z_2$$

$$\cosh(z_1 + z_2) = \cosh z_1 \cosh z_2 + \sinh z_1 \sinh z_2$$