

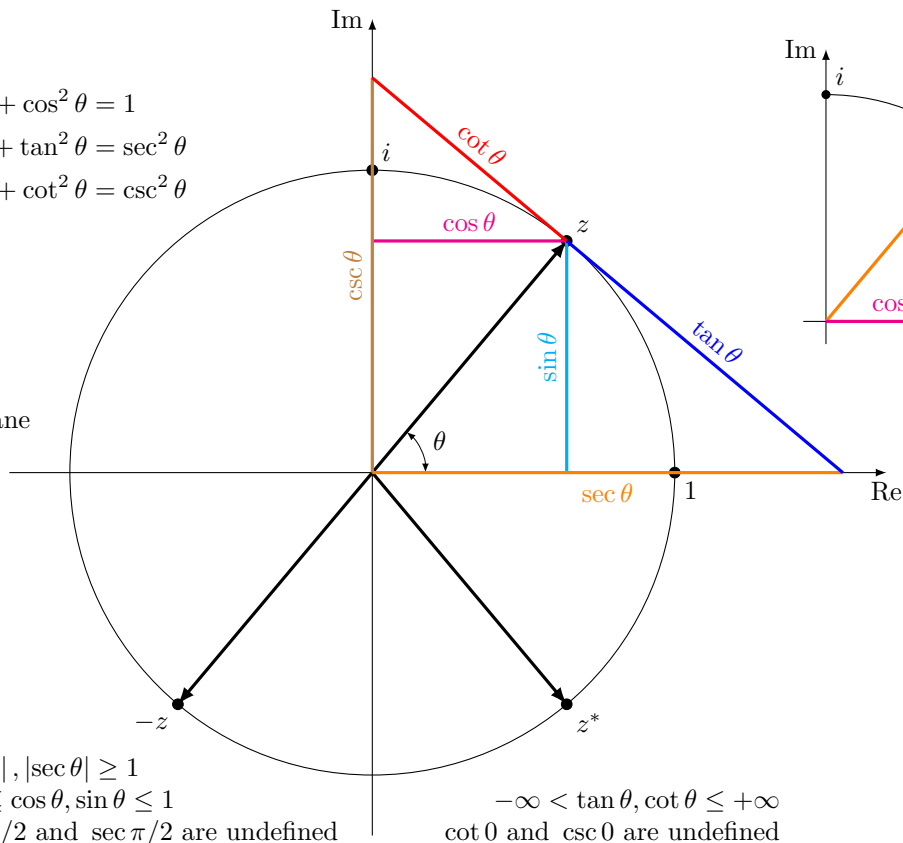
Visualization of trigonometric functions

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

$$1 + \tan^2 \theta = \sec^2 \theta$$

$$1 + \cot^2 \theta = \csc^2 \theta$$

complex plane



$$|\csc \theta|, |\sec \theta| \geq 1$$

$$-1 \leq \cos \theta, \sin \theta \leq 1$$

$\tan \pi/2$ and $\sec \pi/2$ are undefined

$$-\infty < \tan \theta, \cot \theta \leq +\infty$$

$\cot 0$ and $\csc 0$ are undefined