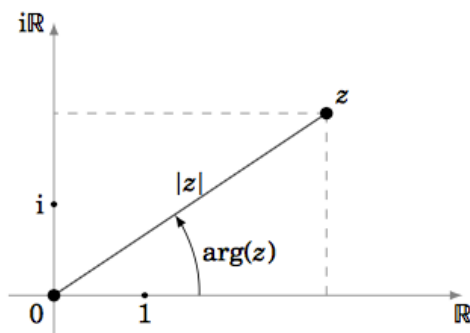


$$z = a + ib$$

avec a et b deux réels.



$$|z| = |a + ib| = \sqrt{a^2 + b^2}$$

$$z \bar{z} = a^2 + b^2$$

$$|\bar{z}| = |z|$$

$$|-z| = |z|$$

$$|z_1 z_2| = |z_1| |z_2|$$

$$|z_1^n| = |z_1|^n$$

$$\left| \frac{z_1}{z_2} \right| = \frac{|z_1|}{|z_2|}$$

$$\arg z = (\vec{u}, \vec{OM}) = \theta$$

$$\text{Pour déterminer } \theta \begin{cases} \cos \theta = \frac{a}{|z|} \\ \sin \theta = \frac{b}{|z|} \end{cases}$$

$$\arg(\bar{z}) = -\arg z \quad [2\pi]$$

$$\arg(-z) = \arg z + \pi \quad [2\pi]$$

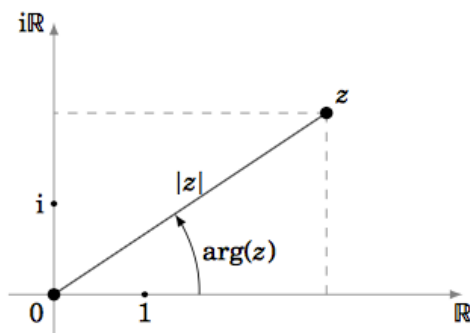
$$\arg(z_1 z_2) = \arg z_1 + \arg z_2 \quad [2\pi]$$

$$\arg z^n = n \cdot \arg z \quad [2\pi]$$

$$\arg\left(\frac{z_1}{z_2}\right) = \arg z_1 - \arg z_2 \quad [2\pi]$$

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