Definition Ⅲ

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Yuji Masuda

(y_masuda0208@yahoo.co.jp)

$$R\times(\pm\infty)=\pm\infty,\ R+(\pm\infty)=\pm\infty,\ (-1)\times(\pm\infty)\neq\mp\infty \ \Rightarrow\ (-1)\times(\pm\infty)=\frac{1}{\pm\infty}\qquad \boxed{\therefore(\pm\infty)\cdot i-1=0}$$

$$\lim_{n\to\infty}\left(1+\frac{1}{(\pm\infty)}\right)^{(\pm\infty)}=e \ \Rightarrow$$

$$1+i=e^{i}\left(\because(1+i)^{\frac{1}{i}}=e\right)$$

$$i=\log(1+i)\left(\because 1+i=e^{i}\right)$$

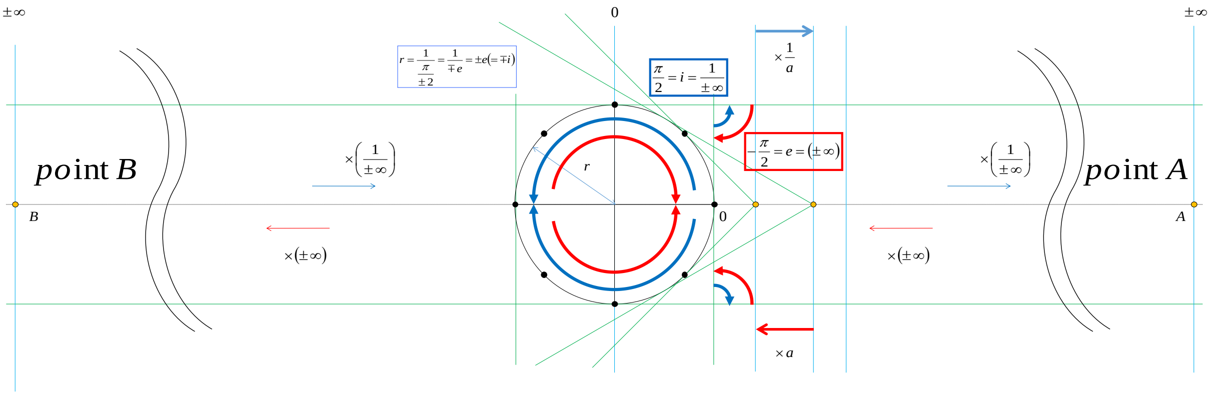
$$(1+i)^{\pi}=-1\left(\because e^{i\pi}=-1\right)$$

$$(1+i\pi)^{\frac{1}{i}}=e^{\pi}\left(\because(1+ir)^{\frac{1}{i}}=e^{r}\right)$$

$$i\pi=-2$$

$$e=-i\left(\because e^{-2}=-1,\ \log i=\frac{1}{2}\pi i=-1\right)$$

$$\boxed{point\ A=point\ B}$$



$$①\ \log\left(-\frac{\pi}{2}\right)=\log e=1$$

$$②\ \log1=\log\left(-e^{2}\right)=0$$

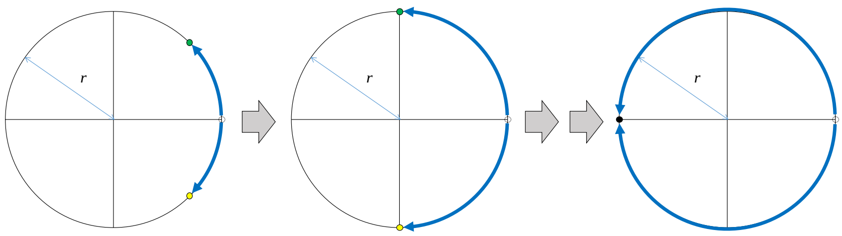
$$③\ \log0=\log\left(\frac{1}{\pm\infty}\right)=\log\left(e^{-1}\right)=\log(-e)=\log\left(\frac{\pi}{2}\right)=-1$$

$$④\ \log(-1)=i\pi=-2$$

$$\log(-1)=\log\left(e^{2}\right)=2\log e=2$$

$$\boxed{\mp2=\pm\infty}$$

$$①\ \log(\mp2)=\log(\pm\infty)=\log e=1$$



$$\boxed{\frac{\pi}{2}=i=\frac{1}{\pm\infty}}$$

$$\boxed{-\frac{\pi}{2}=e=(\pm\infty)}$$

$$r=\frac{1}{\left(\frac{\pi}{\pm2}\right)}=\frac{1}{(\mp e)}=\pm e(=\mp i)$$