Multiplying the minus by the plus and Definition Analysis

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Abstract

The purpose of this short paper is to prove that multiplying by a minus signifies a reverse rotation.

General comments

$\pm\infty$ is constant at any observation point (position).

$$R\times(\pm\infty)=\pm\infty,\ R+(\pm\infty)=\pm\infty,\ (-1)\times(\pm\infty)\neq\mp\infty$$

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

$$②\log 1=0$$

$$③\log 0=\log\left(\frac{1}{\pm\infty}\right)=\log\left(e^{-1}\right)=\log(-e)=\log\left(\frac{\pi}{2}\right)=-1$$

$$④\log(-1)=i\pi=-2$$

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

$$②\Rightarrow③\Rightarrow④\Rightarrow①\Rightarrow②\Rightarrow③\Rightarrow④\Rightarrow①\Rightarrow\cdots$$

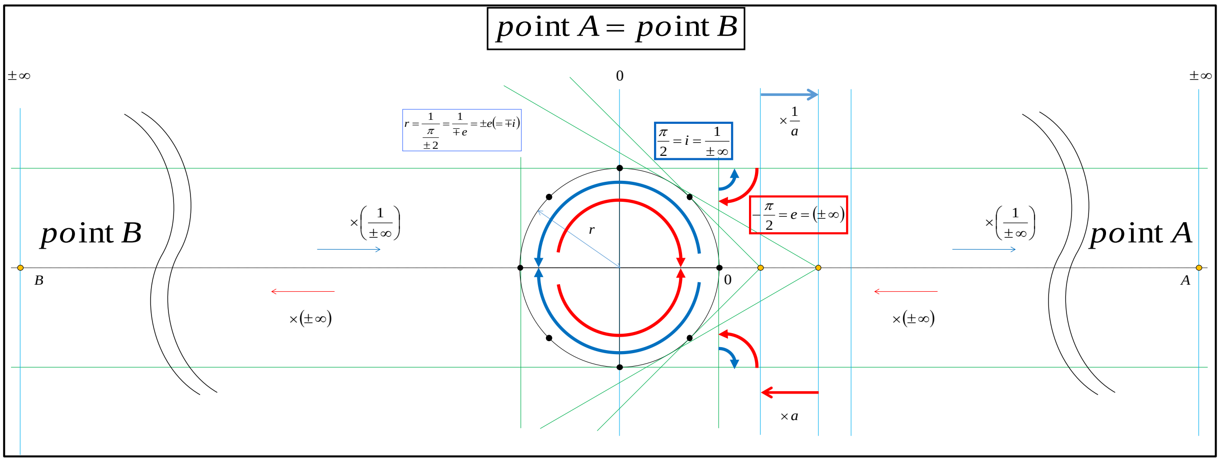
-2   -1 $0=2$ 1

$$\pm\infty=-2\left(\because \pm\infty=\frac{1}{0}=\frac{1}{2}=3=-2\right)$$

Proof

$$①2^0=1$$
$$②2^1=2=0$$
$$③2^2=4=-1$$
$$④2^3=8=-2$$
$$①2^4=16=1$$

$$①3^0=(-2)^0=1$$
$$④3^1=(-2)^1=-2$$
$$③3^2=(-2)^2=4=-1$$
$$②3^3=(-2)^3=2=0$$
$$①3^4=(-2)^4=1$$



At the end

Multiplying by minus means not only a change of sign but also a "reversal of rotation.