First, ±∞ is constant at any observation point (position). If a set of real numbers is R, then

\[ R \times (\pm \infty) = \pm \infty \]
\[ R + (\pm \infty) = \pm \infty \]
\[ (1) \times (\pm \infty) \neq \mp \infty \]

On the other hand, when \( x (\in R) \) is taken on a number line, the absolute value \( X \) becomes larger toward \( \pm \infty \) as the absolute value \( X \) is expanded. Similarly, as the size decreases, the absolute value \( X \) decreases toward 0.

Furthermore, \( x (-1) \) represents the reversal of the direction of the axis.

\[ R \times (-1) \times (\pm \infty) = \frac{R}{\pm \infty} \]
\[ -1 = \left( \frac{1}{\pm \infty} \right)^2 = i^2 \]
\[ 1 = (\pm \infty) \times i \]

\[ \therefore (\pm \infty) \cdot i - 1 = 0 \]

Second, from the definition of napier number \( e \)

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

\[ 1 + i = e^i \left( \therefore (1 + i)^i = e \right) \]
\[ i = \log(1 + i) \left( \therefore 1 + i = e^i \right) \]
\[ (1 + i)^\pi = -1 \left( \therefore e^{i\pi} = -1 \right) \]