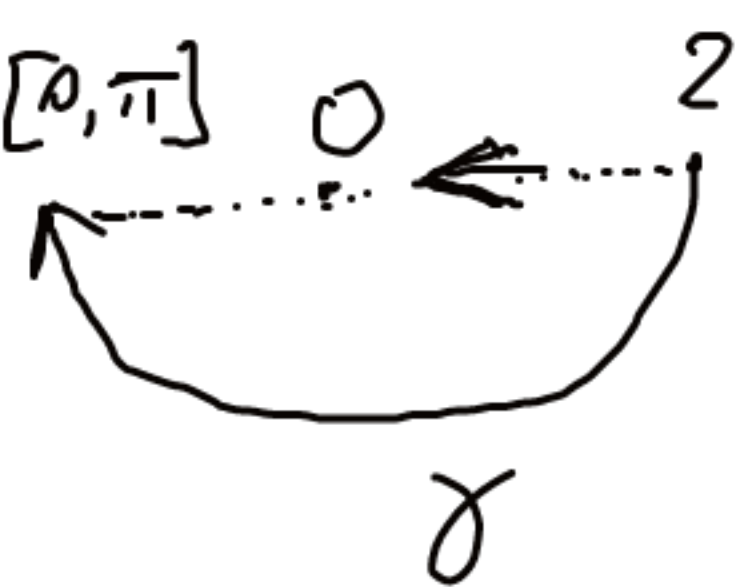


$$\gamma(t) = 2e^{-it}, t \in [0, \pi]$$



$$\int z e^{iz} = \left| \begin{array}{l} u = z \quad u' = 1 \\ v' = e^{iz} \quad v = \frac{e^{iz}}{i} \end{array} \right| = \frac{e^{iz} \cdot z}{i} + e^{iz} =$$

$$= e^{iz} (1 - zi)$$

$$e^{i(2e^{-it})} [1 - 2e^{-it} i] \Big|_0^\pi = e^{i(2e^{-i\pi})} [1 - 2e^{-i\pi} i]$$

$$-e^{2i} [1 - 2i] = e^{-2i} [1 + 2i] - e^{2i} [1 - 2i]$$