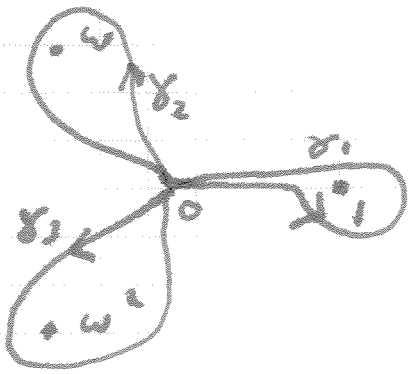
Let $w = \sqrt[3]{1-z^3}$. What are the branchpoints? Let $\omega = e^{2\pi i/3}$ and consider the three loops:



Let T_i be the monodromy action on the three points $\{1, \omega, \omega^2\}$ (that are the values of w when $z=0$) going around γ_i.

(a) How does T_1 act on $\{1, \omega, \omega^2\}$?
Same question for T_2, T_3?

(b) Do $T_1 T_2 = T_2 T_1$?

(c) Do $T_1 T_2 T_3 =$ identity?