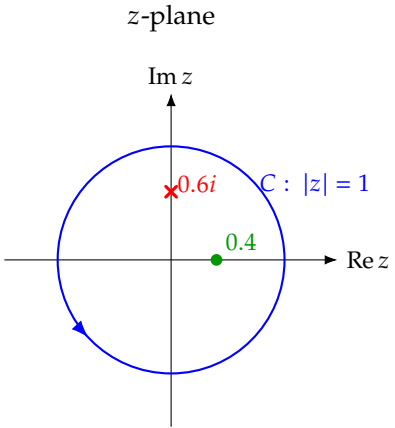
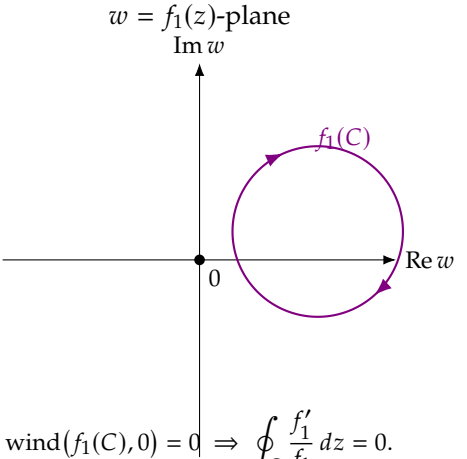


$$f_1(z) = \frac{z - 0.4}{z - 0.6i}, \quad \#Z - \#P = 1 - 1 = 0$$



$$\operatorname{wind}\big(f_1(C), 0\big) = 0 \;\Rightarrow\; \oint_C \frac{f_1'}{f_1}\, dz = 0.$$