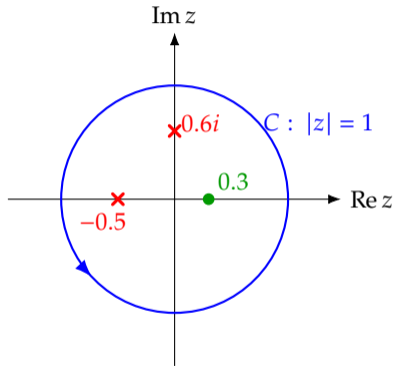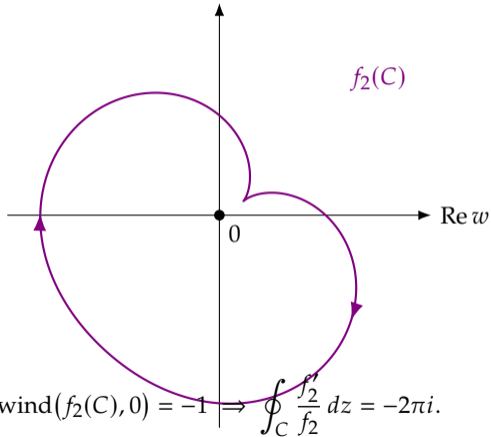## z-plane

$C : |z| = 1$

$0.6i$

0.3

-0.5

$$f_2(z) = \frac{z - 0.3}{(z - 0.6i)(z + 0.5)}, \quad \#Z - \#P = 1 - 2 = -1$$

$w = f_2(z)$-plane

$f_2(C)$

$$\text{wind}(f_2(C), 0) = -1 \Rightarrow \oint_C \frac{f_2'}{f_2} \, dz = -2\pi i.$$