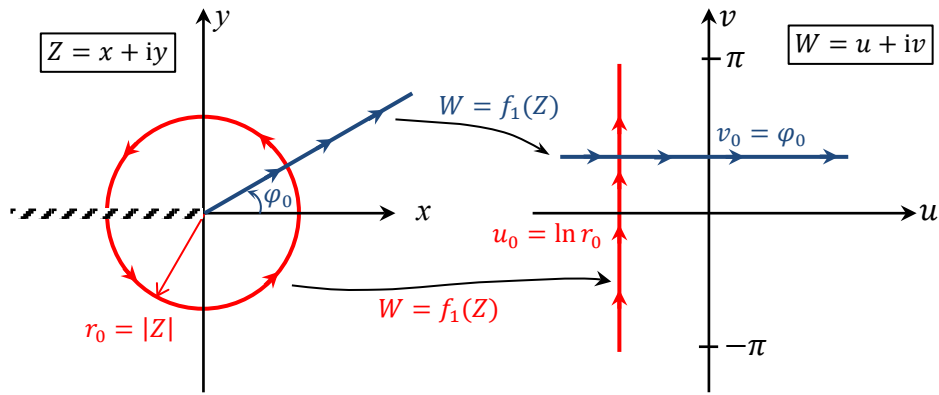
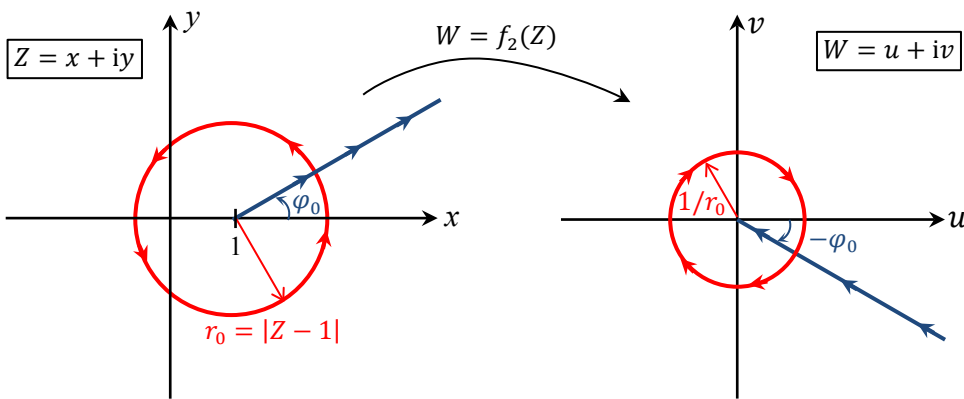


Problem 11) a) $f_1(Z) = \ln Z = \ln|Z| + i\varphi$. We assume the branch-cut is on the negative x -axis.



b) $f_2(Z) = 1/(Z - 1)$.



c) $f_3(Z) = 1/\sqrt{Z - i}$. We assume the branch-cut is below the point $Z = i$ on the y -axis.

