$f(z)$	$z = u + 1/u + 2$	order of u
$z - 1$	$(u - 1)^2/u$	1
z	$(u + 1)^2/u$	2
$z + 1$	$(u^2 + 1)/u$	4
$z^2 - z - 1$	$(u^2 - u - 1)(u^2 + u + 1)/u^2$	8
$z^2 + 1$	$(u^4 + u^3 + u^2 + u + 1)/u^2$	5
$z^2 + z - 1$	$(u^4 - u^3 + u^2 - u + 1)/u^2$	10