

the various integral formulas in several complex variables are manifestations of this same class in different cohomology theories. We then proceed to derive its two most important local properties, the behavior of the residue under a change of variables and local duality theorem. Once the local residue has been properly understood, the global residue theorem turns out, not surprisingly, to be Stokes' theorem.

Next in Section 2 we give some applications of residues. The first two are to intersection numbers and finite holomorphic mappings. These are topics in local analytic geometry, and the use of residues affords an elegant method for studying them. Then we turn to applications of the global residue theorem in projective space. Here it is a kind of Lagrange interpolation formula in several variables, and it provides an amusing technique for studying configurations of points in  $P^2$  leading to several classical results in the theory of plane algebraic curves, including a discussion of the converse to the Bezout theorem.

In Section 3 some of the recent algebraic techniques are introduced. The discussion here is minimal and develops only those methods that will be applied to concrete geometric problems. Following a discussion of Ext, Tor and Koszul complexes, a synthesis occurs when our analytically defined local residue reappears in a final intrinsic