

unit disk into a negatively pinched Riemannian surface together with its applications in the geometric theory of functions. In Ch. II and III are proved the various higher-dimensional generalizations of the Schwarz-Pick-Ahlfors lemma. Ch. IV is devoted to introduce certain pseudodistances in every complex manifold intrinsically and shows that such a pseudodistance coincides with that due to Poincaré defined on the unit disk and also that every holomorphic mapping is distance-decreasing. After studying in Ch. V the theory of holomorphic mappings of a complex manifold into a hyperbolic manifold, the generalization of the big and little Picard theorems to higher dimensional manifolds is attempted in Ch. V, VI and VII.

In Ch. VIII the relationship between hyperbolic manifolds and minimal models is studied where one sees that the generalized Picard theorem plays the essential role. Closely following the constructions of the pseudodistances in Ch. V the author successfully defines in Ch. IX two kinds of intermediate dimensional measures on a complex manifold in an intrinsic manner.

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Integral Formulas in Riemannian Geometry, by K. Yano. Marcel Dekker, N.Y., 1970. U.S. \$10.75.

More than three decades of years have passed since S. Bochner initiated the use of integral formulas as a powerful tool for obtaining the global results in Riemannian geometry and during these periods the scheme was applied in the various cases by his followers to a broad extent. It is now then desirable to have any edition that would serve new explores encyclopedically and this book is indeed the one that meets this demand.

After recalling in Ch. I several elementary formulas of Riemannian geometry, the discussion of harmonic 1-forms and Killing vector fields is presented in Ch. 2. Ch. 3 is devoted to the use of integral formulas and they are here specifically applied for the geometry of Riemannian manifolds with constant scalar curvature admitting an infinitesimal conformal transformation, while Ch. 4 is to generalize all of the notions stated in Ch. 2. Ch. 5 is occupied by the preparation for the discussion to be made in the following chapter about closed hypersurfaces with constant mean curvature in a Riemannian manifold. The last two chapters deal with the topics stated in Ch. 2 again for the case that any Riemannian manifold admitting a harmonic 1-form or a Killing vector field is associated with boundary.

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