

Index

This index contains page references to topics of major importance and to terminology: usually when the topic or symbol is first used, or is used in a new sense, or features in a major theorem.

- $A(p)$, $A(p, \beta)$ 66
 $A_1(p, \beta)$ 71
 $A(p, \lambda)$, $A(p, \beta, \lambda)$, 73
 $A(p, k, N)$, 99
 $A(p, b, c)$, 100
 A_0 , 38
 A_1, A_2 , 84
 A_k , 243
 $A(r, f)$, 27
 a_2 , 1, 162
 a_3 , 215
 a_5 , 161, 230
 a_4, a_6 , 230
 $a_n(\lambda)$, 221, 247
 α , 9, 45, 50, 150
 α_0 , 45
 α_n , 20
 $\alpha(\theta)$, 18
 $\alpha(r)$, 64
 $\alpha(\zeta)$, 42
 admissible domain, 109
 analytic domain, 104
 areally mean (a. m.) p -valent, 144
 argument of $f(z)$, 224
 argument of $f'(z)$, 226
 asymptotic behaviour, 19, 60, 154, 155
 asymptotic behaviour of coefficients, 15,
 64, 151, 156
 averaging assumptions, 19, 37, 144

 B , 136
 [B] for Burkill [1951], 31
 B_f , 200
 B_t^{ν} , 208
 $b_j(z)$, 26
 β , 55, 66, 200, 209
 β_0 , 79
 $\beta(0)$, $\beta(t)$, 209
 \mathfrak{B} , 143
 \mathfrak{B}_0 , 137

 Bieberbach's conjecture, xi, 4, 230
 Bloch's constant, 136
 Bloch's Theorem, 136
 Bloch functions, 143
 bounded univalent functions, 78

 C, C_1, C_2, \dots 172
 C_0 , 61
 $c_n(t)$, 216
 $c_k, c_k(0), c_k(t)$, 237
 $C. A. x$, 7, 103
 circumferentially mean (c. m.) p -valent,
 144,
 coefficients of univalent functions, 9, 15,
 247
 of mean p -valent functions, 65, 131.
 condenser, capacity of a condenser, 109
 connectivity, 104
 convex function, 70
 convex univalent functions 11, 12
 convex domain, 11
 correspondence of points under a
 transformation, 200

 D, D^* , 115
 D_f , 128
 D_k , 243
 \overline{D} , 104, $D(\theta_0)$, 61
 $d_n(\lambda)$, 26, 243
 d_f , 200
 Δ , 20, 33, 163
 Δ' , 20
 $\Delta_n(\varepsilon)$, 19
 $\nabla^2 u$, 77, 107, 169
 δ_f , 200
 de Branges' Theorem, xi, 230
 dense subclass, 197
 diameter, 199
 Dirichlet's minimum principle, 109
 problem of Dirichlet, 108

- distortion theorems, 4, 28
 domain, 104
- E_1, E_2 , 86
- $f_k(z)$, 95, 161
 $f_n(z)$, 20
 $f(z, t)$, 210
 functions of maximal growth, 16, 17, 45
 with k -fold symmetry, 95, 159, 185
 without zeros, 145, 159
 zero at the origin, 61, 64, 148, 158, 165
- $G(R)$, 77, 170
 $G(t)$, 207
 $G(\theta)$, 240
 $g(R)$, 77
 $g_n(t)$, 239, 242
 $g_r(\xi)$, 215, 237
 $g_r(z)$, 207
 $g(z, t)$, 210
 γ , 82
 $\gamma_r, \gamma_r t''$, 207
 $\Gamma(x)$, the gamma function, 26, 151
 Gauss' formula, 105
 Goodman's conjecture, xi, 163
 Green's formula, 106, 169
 Green's function, 122
- $H(R)$, 37
 $H^+(R)$, 39
 $h(R)$, 37
 $h(z, t', t'')$, 208
 $h(z, t)$, 237
- $I_1(r, f)$, 9
 $I_i(r, f)$, 27, 67
 $I_G(r, f)$, 77
 $I(E)$, 84
 $I_D(u)$, 109
 $I(z)$, 239
 inner radius, 124
 inverse function, 222
- $\kappa(t)$, 210
 Koebe function, 2
 k -symmetric, 95, 185
- $l(R)$, 29, 199
 l_f , 147
 $\Lambda_k^n(t)$, 235
 $\lambda(t)$, 207
 Landau's Theorem, 143
 Lebesgue integral, 31
 Legendre's addition theorem, 232
 Legendre polynomials, 231
 associated Legendre functions, 231
- length–area principle, 29
 Lipschitzian, Lip, 104
 Löwner's differential equation, 197
- $M(r, f)$, 8, 33
 μ , 33, 172, 180
 μ_q , 28
 \mathfrak{M} , 141
 major arc, 16, 19, 154
 maximal growth, 45
 mean p -valent, xi, 38, 64, 165
 Milin's conjecture, 230, 236
 minor arc, 16, 21, 153
 modules, theory of, xi, 229
 modulus of continuity, 116
 modulus of doubly connected domain, 110
- $n(w)$, 29, 144
 $n(w, \Delta, f)$, 144
 $n(r, w)$, 67
- O, O^* , 113
 $\Omega(\delta)$, 117
 $\omega(R)$, 51
 $\omega(z)$, 109, 243
 $\omega^*(z)$, 119
 odd univalent functions, 161, 186, 248
 omitted values, 3, 94, 150
 order (of $f(z)$ at ξ), 42
- $P_n(z), P_n^k(z)$, 231
 $p(R)$, 29, 67, 144
 $p(r, R)$, 67
 $p(R, \Delta, f)$, 29
 p -valent, xi, 1, 28, 163
 power series, 243
 power series with gaps, 98, 99, 101
 principal frequency, 103
- R_f , 131
 r_n , 19
 r_0, r_0^* , 126
 radius of convexity, 226
 radius of greatest growth (r. g. g.), 17, 48
 radius of starshapedness, 227
 real coefficients, 13, 162, 220
 regularity theorems, xi, 16, 49, 150
 Riemann's mapping theorem 44, 204
 Robertson's conjecture, 249
 Rogosinski's conjecture, 250
 Rouché's Theorem, 147
- S , 22, 36
 S_0 , 36
 $S(R)$, 22
 S_f , 200
 $S_G(r, f)$, 78

- $S_{\nu}t^{\nu}$, 208
 $S_{\lambda}(r)$, 69
 σ_k , 242
 \mathbb{G} , 1
 \mathbb{G}_0 , 6, 149
 \mathbb{G}_1 , 82, 197, 204
 \mathbb{G}_2 , 82
 Schwarz's Lemma, 11
 Schwarz's reflection principle, 44
 Schwarz's inequality, 30
 slit, 204
 sectionally analytic slit, 198
 starlike domain, 14
 starlike univalent function, 14, 188
 Stolz angle, 22
 subordination, 250
 symmetrization, 112
 symmetrization, circular or Pólya's, 113
 symmetrization of condensers, 119
 symmetrization of functions, 116
 symmetrization, principle of, 127
 Steiner symmetrization, 112
 Szegő's conjecture, 95
 τ , 209
 $\theta(\sigma)$, 30
 2-point estimate, 176
 torsional rigidity, 103
 transfinite diameter, 103
 transformation, 200
 infinitesimal transformation, 203
 typically real, 13
 $u^*(z)$, 117
 univalent, xi, 1
 variational method, xi, 229
 Vitali's convergence theorem, 21
 $W(R)$, 37, 76
 $\xi_1(R)$, $\xi_2(R)$, 51