

INDEX

- A
- action 4
 action, doubly transitive 15
 adjacent 44
 adjacent pair 54
 algebraically closed 221
 amalgamation property 183
 Archimedean 98
 automorphism, inner 71
 automorphism, outer 71
 α -configuration 17
 α -set 187
 α -set of degree κ 199
 α -splitting subset 199
- B
- balanced 18
 between vii
 between, lies 52
 between, strictly vii
 block 12
 block, covers 83
 block, extensive 81
 block, fat 82
 block, natural 83
 bounded 25
 bounded above 25
 bounded below 25
 boundity 58
 bump 25
 bump, one 25
 bump of 26
- C
- cardinal, regular 188
 centraliser 47
 chain vi
 chain, primitive 14
 character 23
 character, final 23
 character, initial 23
 closed interval vii
 closed ℓ -subgroup 151
 closed partial congruence 166
 closure (of a subgroup) 165
 cofinal 23
 cofinality 23
 coherent 97
 cointial 23
 cointiality 23
 complete ℓ -subgroup 157
 completely distributive 157
 completion, Dedekind 22
 completion, local 141, 173
 component 18
 component, global 118
 component, local 118
 component, primitive 20
 Config(n) 110
 Config(∞) 110
 configuration 18
 configuration, α - 17
 congruence 8
 congruence, closed 166
 congruence, covers 19
 congruence, natural 84
 congruence, natural partial 85
 congruence, singleton 10
 congruence, trivial 10
 congruence, universal 11
 convex subset vii
 convexification 25
 coordinate map 120, 125
 coterminial 23
 coterminality 23
 countable vi
 covers (blocks) 83
 covers (congruences) 19
 cover (convex ℓ -subgroups) 207
 cut 21
- D
- dead 160
 dead segment 160

Dedekind completion 22
 degree κ (α -set of) 199
 dense chain vii, 83
 dense in itself 83
 dense p.o. set vii
 dense subset vi, 95
 depressible 154
 disjoint 24
 distributive, completely 157
 distributive lattice vi
 domain (of a partial congruence) 85
 doubly transitive 15
 doubly transitive, weakly 109

E

embedding, standard 128
 existentially closed 221
 extensive block 81
 η_α -set 187

F

faithful action 4
 fat block 82
 final character 23
 finitely presented ℓ -group 231
 fixed point interval 194
 full (periodic) 111
 fundamental triviality 11

G

G-invariant set 6
 G-orbit 6
 general recursion 232
 generates (as an ℓ -group) 217
 global component 118
 global part (\mathfrak{G} -) 120
 greatest lower bound vi
 group ring 74

H

hole 22
 Holland's Theorem 240
 homogeneous (chain) 6
 homogeneous (congruence) 84
 homogeneous, m - 29
 homogeneous, \mathcal{N}_α - 187
 homogeneous, rigidly 98

I

image vi
 initial character 23

inner automorphism 71
 insoluble word problem 231
 insular 131
 integral 87
 interval vii
 interval, closed vii
 interval, open vii
 interval support property 32
 invariant set, G- 6
 isotropy subgroup 11

K

kernel (equivalence relation) 9
 kernel (homomorphism) 4

L

ℓ -characteristic subgroup 173
 ℓ -embedding 7, 8
 ℓ -group 7
 ℓ -homomorphism 7, 8
 ℓ -ideal 65
 ℓ -isomorphism 7, 8
 ℓ -permutation group 5
 ℓ -simple 129
 ℓ -subgroup 7
 lateral completion 250
 laterally complete 222
 lattice vi
 lattice, distributive vi
 lattice isomorphism vii
 lattice-ordered group 7
 lazy subgroup 4
 least upper bound vi
 left (f of g) 43
 lies between 52
 linearly ordered set vi
 local completion 141, 173
 local component 118
 local part (\mathfrak{G} -) 120
 locally primitive 141
 long line 69
 long orbit 18

N

natural block 83
 natural congruence 84
 natural partial congruence 85
 negative orbit 18
 negative parity 25
 normal valued 207
 normaliser 212

O	R
o-embedding	range of function
o-group	recursive function
o-homomorphism	recursive set
o-isomorphism	regular cardinal
O-group	representation
one bump	representation, right
open interval	regular
orbit, G-.	representing
orbit, long	subgroup
orbit, negative	restricted wreath product
orbit, positive	restriction of function
orbit Wreath product	right cosets, set of
orbital	right regular
ordered permutation group	representation
ordermorphic	right totally ordered group
ordermorphism	rigidly homogeneous
outer automorphism	
overlapping	S
	sentence
P	separation property
p.o. group	set, α -
p.o. set	set, α - of degree κ
parity	set, η_α
parity, negative	singleton congruence
parity, positive	splitting subset, α -
parity, of orbital	stabiliser subgroup
partial congruence	standard embedding
partially ordered group	static
partially ordered set	strictly between
pathological	strictly positive
period	subalgebra
periodic	support
plenary	support property
pointwise order	support property, interval
pointwise suprema	supporting interval
positive	
positive orbit	T
positive parity	totally ordered group
positive, strictly	totally ordered set
presentable function	transitive
presentation of ℓ -group	transitive, doubly
prime subgroup	transitive, m-
primitive	transitive, uniquely
primitive chain	transitively derived
primitive component	transversal
primitive components,	trivial congruence
set of	trivially ordered set
primitive, locally	
primitive segments	
primitive, weakly	

U

unbounded. 25
 uniquely transitive. 98
 universal congruence 11

V

value. 85,207
 value of (α, β) 77,86
 value of g 207

W

weakly doubly transitive . . 109
 weakly primitive 141
 word problem, insoluble. . . 231
 wreath product 119
 wreath product, restricted . 119
 Wreath product . . . 117,118,123
 Wreath product, orbit. . . 196

INDEX OF SYMBOLS

(The characters are listed in order of appearance.)

$A \subseteq B$	vi	\mathbb{Z}_2	vii
$A \subsetneq B$	vi	e	vii
$A \setminus B$	vi	$G \neq \theta$	viii
A^f	vi	$G \equiv H$	viii
$f|C$	vi	$A \overset{\leftarrow}{\times} B$	ix,13
\emptyset	vi	$A(\Omega)$	2
ω	vi	$g_1 \vee g_2$	2
ω_1	vi	$g_1 \wedge g_2$	2
$|A|$ . . . . .	vi	$\ker(\theta)$	4
$\alpha < \beta$	vi	αG	6
$\alpha \vee \beta$	vi	$\alpha \mathcal{E}$	8
$\alpha \wedge \beta$	vi	Ω/\mathcal{E}	8
$[\alpha, \beta]$	vii	\mathcal{S}	10
(α, β)	vii	\mathcal{U}	11
Ω^*	vii	G_Δ	11
$\overset{\leftarrow}{\cup}\{\Omega_i : i \in I\}$	vii	$G_{(\Delta)}$	11
$\overset{\rightarrow}{\cup}\{\Omega_i : i \in I\}$	vii	G_α	11
\mathbb{Z}	vii	Δ'	16
\mathbb{Q}	vii	α -configuration	17
\mathbb{R}	vii	$\hat{G}_{(\Delta)}$	18
\mathbb{Z}^+	vii	$(\mathcal{E}, \mathcal{K})$ component	18
\mathbb{Q}^+	vii	Δ/\mathcal{E}	19
\mathbb{R}^+	vii	$\bar{\Omega}$	22
$H \triangleleft G$	vii	$\text{ci}(\Lambda)$	23
$H \rtimes G$	vii	$\text{cf}(\Lambda)$	23
$R(C)$	vii,240	$c_{\mu\nu}$	23

c_{μ^*}	23	$I(G)$	71
$c_{*\nu}$	23	ϕ_1	71
c_{**}	23	$R[G]$	74
$\text{supp}(g)$	24	$K < K'$	76, 86
$\text{Conv}_{\Omega}(\bar{\Delta})$	25	$k(G, \Omega)$	76, 85
$\overline{\text{supp}}(g)$	25	$k(\Omega)$	76
m-transitive	28	$(\mathcal{C}_K, \mathcal{C}^K)$	76
m-homogeneous	29	$\text{Val}(\alpha, \beta)$	77, 86
$B(\Omega)$	30	\hat{G}	77
$[x, y]$	32	$(\alpha \mathcal{C}^K)$	
$|g|$ . . . . .	36	(G_K, Ω_K)	78, 87
$L(\Omega)$	40	$F(\Delta)$	82
$R(\Omega)$	40	$\text{dom}(K)$	85
$\text{bump}(g)$	42	G^+	97
$\text{bump}(g, h)$	43	$\gamma_p(G)$	100
$g_1 \mathcal{L} g_2$	43	$\overline{F_x}(G_{\alpha})$	106
$R(g)$	44	$\text{Config}(n)$	110
$L(g)$	44	$\text{Config}(\infty)$	110
$B(g)$	44	$\{g_{\tau}\}$	117
$\text{Adj}(g_1, g_2)$	44	$\text{Wr}\{(G_K, \Omega_K) : K \in k\}$	117, 123
$f \approx g$	46	$G \text{ Wr } H$	118
$C_G(X)$	47	$(G, \Omega) \text{ Wr } (H, T)$	118
$C(X)$	47	$(G, \Omega) \text{ wr } (H, T)$	119
$\langle g \rangle$	47	$L(\mathcal{C})$	120
$C(g)$	47	$(G, \Omega) \text{ Wr } (H, T) \text{ Wr } (L, B)$	121
$B(f, g, h)$	53	Ω^+	122
$\bar{B}(g)$	53	$\text{supp}(\alpha)$	122
$L(a, b, f, g)$	53	$\frac{0}{\hat{\Omega}}$	122
$L'(a, b, f, g)$	54	$\hat{\Omega}$	122
$\mathcal{L}(a, b, f, g)$	54	$k(\alpha, \beta)$	122
$\langle X \rangle$	60	W_1	122
\mathbb{L}'	69	\equiv_K	122
\mathbb{L}	69	\equiv_{K^*}	122
$F_x(g)$	69	α^K	123
$\text{Aut}(G)$	71	$g_{K, \alpha}$	123

$[H, H]$	. . . . .	.129
Ω^0	. . . . .	.141, 172
G^-	. . . . .	.148
$\overline{\mathcal{C}}$	. . . . .	.153
$D(G)$	. . . . .	.157
I_J	. . . . .	.157
$\Lambda_{\mathcal{C}}$	. . . . .	.160
\mathcal{C}	. . . . .	.160
C^*	. . . . .	.165
$\overline{F\mathcal{X}}(C)$	. . . . .	.165
$G(\overline{F\mathcal{X}}(C))$	. . . . .	.165
\mathcal{C}	. . . . .	.168
η_α -set	. . . . .	.187
α -set	. . . . .	.187
\mathcal{N} -homogeneous	. . . . .	.187
κ^+	. . . . .	.188
G.C.H.	. . . . .	.188
T^b	. . . . .	.194, 196
$T^\\#$	. . . . .	.201
$I(g\psi)$	. . . . .	.203
$F^*(g\psi)$	. . . . .	.203
$\Delta(\alpha, g)$	. . . . .	.206
\mathcal{N}	. . . . .	.208
\mathcal{L}	. . . . .	.208
\mathcal{A}	. . . . .	.208
ξ	. . . . .	.208
$\mathcal{U} \cdot \mathcal{V}$	. . . . .	.208
$\sqrt{}^{n+1}$208
$N(H)$	. . . . .	.212
$G \leq H$	. . . . .	.221
ω_ω	. . . . .	.231
$x*y$	. . . . .	.234
$x+y$	. . . . .	.237