Index.

abelianisation 12
Andrews-Curtis conjecture 12, 89
arc 13
Baumslag-Solitar group 83, 85
Borsuk-Ulam theorem 31, 90
boundary (Gromov) 86, 93
Cayley graph 16
centre 61
circuit 13
cobounded 22
commensurable 35
commutator 12
complex hyperbolic space 62 87, 92
cocompact 26
concatenate 7
convergence group 87, 93
covering space 45
curve complex 88, 94
cycle 13
Dehn algorithm 1, 85
diameter 22
f.g. = finitely generated
f.p. = finitely presented
finitely generated 3
finitely presented 10
four-point condition 72
free abelian group 3
free group 6
free (action) 25, 44
freely generated 5
fundamental group 41
generating set 3
geodesic 22
Hausdorff distance 80
Heisenberg group 4, 85, 89, 93
homogeneous 50
homotopic 40
hyperbolic (metric space) 61
hyperbolic geometry 49, 91
hyperbolic group 82
ideal boundary 49
ideal triangle 52
isometry 25
isoperimetric inequality 53, 85, 93
isotropic 51
JSJ splitting 87, 94
length 23
locally finite 13
loop 40
Möbius transformation 49
normal closure 10
p.d. = properly discontinuous
p.d.c. = properly discontinuous and cocompact
path connected 41
Poincaré model 49

polynomial growth 38, 90
presentation 10
projection 67
proper 24
properly discontinuous 25
q.i. = quasi-isometric
quasigeodesic 78
quasi-inverse 28
quasi-isometric 27, 33
quasi-isometry 27
R-tree 62, 92
rank (free abelian) 3
rank (free) 6
rectifiable 23
reduced (word) 9
regular (graph) 13
relatively hyperbolic 88, 94
relator 11
Rips complex 84
Schwarz-Milnor lemma 64
simply connected 42
small cancellation 1, 89
spanning tree 70
stable length 83
surface 54
surface group 58
symmetric 4
taut 66
Teichmüller space 57, 91, 94
tessellation 53, 91
Thurston's conjecture 1, 59, 94
torsion-free 36
torus 41
tree 15
universal cover 44
valence 13
virtually 26
wedge of circles 42
word 7
word problem 85