

Index

Notation

- \widehat{AB} Arc of a circle from A to B , 49
 \overline{AB} Length of segment \overline{AB} , 3
 \overleftrightarrow{AB} Line on A and B , 3
 \overrightarrow{AB} Line segment between A and B , 3, 293
 \overleftarrow{AB} Ray from A through B , 25, 294
 $\angle ABC$ Angle ABC with vertex at B , 3, 294
 $\triangle ABC$ Triangle with vertices A , B , and C , 3, 294
 $AB//CD$ A and B separate C and D , 232
 \mathbf{AF}^2 Affine plane over the field F , 279
 α^{-1} The inverse of α , 135
 \mathbb{C} The complex numbers, 65
 $\mathbb{C}^\#$ The extended complex numbers, 170
 \mathbb{C}_n The cyclic group with n elements, 185
 $d(A, B)$ Distance from A to B , 62
 d_H Hyperbolic distance, 121, 250
 d_T Taxicab distance, 31, 78
 \mathbb{D}_n The dihedral group with n rotations, 185
 \mathbb{D}'_n The symmetry group of a rectangular prism, 203
 \mathbf{F} A field, 279
 $\langle g_1, g_2, \dots, g_n \rangle$ Generators of a group, 191
 $H(PQ, RS)$ Harmonic set, 228
 $k \cdot l$ The point of intersection of lines k and l , 231
 $m\angle ABC$ Measure of angle $\angle ABC$, 14
 $n!$ n factorial, product of first n positive integers, 205

- $\overline{\mathbf{P}}$ The icosahedral group, 203
 \tilde{P} Oriented point, 250
 \mathbf{PF}^2 The projective plane over the field F , 281
 \mathbb{Q} The rational numbers, 76
 \mathbb{R} The real numbers, 62
 S_n The symmetric group on n elements, 205
 $\overline{\mathbf{T}}$ The tetrahedral group, 203
 \vec{v} Vector, 85
 $\overline{\mathbf{W}}$ The octahedral group, 203
 $\|(x, y)\|$ Length of vector (x, y) , 85
 \mathbb{Z} The integers, 77
 \mathbb{Z}_n The integers modulo n , 279
 \cong Congruent, 3
 \parallel Parallel, 12
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