

- Arc(s)**, 339–340
 - adjacent, 339
 - of chord, 344
 - congruent, 340
 - intercepted, 349
 - length, 452
 - major, 339
 - measure of, 339
 - minor, 339–340
- Area(s)**, 423–425
 - circle, 446, 503
 - and congruence, 423, 465–466
 - lateral
 - of cone, 491
 - of cylinder, 490–491
 - of prism, 476–477
 - of pyramid, 482–484
 - maximum, 427, 503, 514
 - parallelogram, 429
 - ratios of, 456–457
 - rectangle, 424
 - regular polygon, 441
 - rhombus, 430
 - sector, 452
 - similar figures, 457
 - similar solids, 508–509
 - sphere, 497
 - square, 423
 - surface, 476
 - total, of prism, 476
 - trapezoid, 435
 - triangle, 429, 434, 456, 465–466
 - under a curve, 428, 438–439
- Argument**
 - making a convincing; numerous exercises throughout, such as 24 (Exs. 13, 14), 47 (Ex. 20), 86 (Ex. 20)
 - See also* Proofs, paragraph form
 - valid, 649–651
- Auxiliary line**, 94
- Axes**, 113, 523
- Axioms**, 12
- Axis of symmetry**, 611
- Base(s)**
 - of cone, 490
 - of cylinder, 490
 - of isosceles triangle, 134
 - of parallelogram, 424
 - of prism, 475
 - of pyramid, 482
 - of rectangle, 424
 - of trapezoid, 190
- Between**, 11
- Biconditional**, 34
- Biographical Note**
 - Agnesi, Maria Gaetana, 338
 - Banneker, Benjamin, 171
 - Fuller, R. Buckminster, 507
 - Hopper, Grace, 379
 - Lobachevsky, Nikolai, 304
 - Morgan, Julia, 49
 - See also* Mathematicians
- Bisector**
 - of angle, 19, 44, 154, 376
 - of segment, 13
 - perpendicular, 153, 380
- Calculator Key-In**, 109, 253, 434, 445, 451, 488, 496, 503, 514
- Cantor set**, 688, 689, 691
- Careers**
 - Accountant, 400
 - Carpenter, 100
 - Cartographer, 213
 - Computer Animation Programmer, 598
 - Geologist, 36
- Cavalieri's Principle**, 516–517
- Center**
 - of circle, 329
 - of gravity, 390
 - of mass, 391
 - of regular polygon, 441
- Centroid**, 387, 391, 556, 562, 669
- Ceva's Theorem**, 273
- Challenge**, 9, 121, 139, 194, 207, 217, 260, 274, 280, 294, 316, 385, 410, 455, 464, 480, 487, 495, 502, 513, 552, 614
- Chapter Review**, 30, 67, 111, 160, 197, 235, 277, 323, 369, 416, 470, 518, 567, 619
- Chapter Summary**, 29, 66, 110, 159, 197, 235, 277, 322, 368, 415, 469, 518, 566, 618
- Chapter Test**, 31, 68, 112, 162, 199, 236, 279, 324, 371, 418, 471, 519, 568, 620
- Chord(s)**
 - arc of, 344
 - of circle, 329, 344–345
 - common, 331
 - intersecting, 357, 362
- Circle(s)**, 329–330
 - angles of, 349–361
 - arcs of, 339–340, 452
 - area of, 446, 503
 - center of, 329
 - chord of, 329
 - circumference of, 446
 - circumscribed, 330
 - concentric, 330
 - congruent, 330
 - constructions involving, 392–395, 414
 - diameter of, 329
 - equation of, 524–525
 - inscribed, 334
 - nine-point, 414
 - radius of, 329
 - secant of, 329
 - sector, 452–453
 - segments in, 361–363
 - tangent of, 334
 - tangent to, 329, 333–334, 353, 363
- Circumcenter**, 387, 556, 563, 669
- Circumference**, 446
- College Entrance Exams, Preparing for**, 70, 164, 238, 326, 420, 520, 621, 640–643
- Compass**, 375
- Complement**, 50
- Composites of mappings**, 599–602
- Composition**, 599
- Computer Key-In**, 48, 183, 226, 261, 299, 428, 438, 481, 488, 504, 515, 528
- Conclusion**, 33, 209
- Conditional**, 33–34, 208–209, 646–647
- Cone(s)**, 490–491
 - lateral area, 491
 - oblique, 490, 517
 - parts of, 490–491
 - right, 490
 - sketching, 493
 - volume, 491, 517