

Index

- Abbenes, J.G.J. 218n.59
 Acerbi, F. 19–20, 43n.29, 123
 Acosta-Hughes, B. 194n.31, 214
 Alexander the Great 56
 Alexandria 54–6, 59–60, 93, 99, 107, 158, 181,
 199, 209–10, 228, 234, 237
Alexipharmaca, see Nicander
 algebraical symbols 48
 alphabetic numerals 51–2
 alternative proofs 96, 125–30
 analysis 75, 108
 anthypharesis 42
 Antipater of Sidon 60n.42
 Apollodorus (calculator) 196–8
 Apollodorus (physician) 189
 Apollonius of Perga 29, 61, 77, 93–4, 99–100,
 107, 110, 113, 120, 127–8, 139, 141, 152,
 154–5, 157, 166–7, 237, 239
Conics 8n.9, 61, 64–5, 91, 112
Book I 91, 99–100, 102, 104, 105n.33,
 109–10, 117–20
Book II 91
Book III 88–91, 100, 108
Book IV 91, 109
Book VI 91, 109
Book VII 71–4, 91, 108
Cutting off of a Ratio 108–9
Hexamer Line 49–54, 56, 58, 61, 110, 112,
 166–7
Okutokion 157
 Apollonius of Rhodes 176–8, 190, 193, 216–18,
 220–2, 226, 234, 236, 239–40
 Arabic mathematics 64–5, 71, 75, 78–9, 82, 88,
 108, 112, 156
 Aratus 33, 110, 152, 168–71, 182–7, 189, 221–3,
 239
 Arbelus 147, 156
 Arcesilaus 232n.4
 Archimedes, works by
Balancing Planes, see *Planes in Equilibrium*
Cattle Problem 33–4, 56, 58, 136, 146–7, 167–8
Conoids and Spheroids 81, 122, 136, 138, 146
Floating Bodies 135, 146
Heptagon in a Circle 147–8
Lemmas 147, 156
Measurement of Circle 21–8, 29, 32, 45, 58, 63,
 146
Method 5n.6, 75–80, 103–4, 120–2, 126, 128–9,
 131, 146, 148, 157, 239
Mutually Tangent Circles 147
Planes in Equilibrium 40–1, 48, 77, 80–1, 103,
 123–5, 135, 137–8, 145–6
Quadrature of the Parabola 126, 128–31, 146,
 238n.15
Sand-Reckoner 30–3, 56–8, 105–6, 136, 147,
 156, 164, 166–7, 237, 240
Sphere and Cylinder I 3, 5n.6, 66–70, 77,
 80–2, 100–4, 113, 128, 136, 146, 238n.15
Sphere and Cylinder II 3, 67, 106, 123, 126, 136,
 146, 238n.15
Spiral Lines 1–15, 19, 40, 45, 75n.9, 80–1,
 126–7, 136, 138, 144–6, 154–5, 238n.15
Semi-Regular Solids 44–5, 146–7
Stomachion xiii 17–20, 22, 35–6, 58, 66, 136,
 145–7, 156–7
 Archimedes' axiom 4, 129
 Archimedes' screw 155
 Archytas 8n.9, 162–3, 198–9, 232–4
Argonautica, see Apollonius of Rhodes
 Aristaeus 94–6
 Aristarchus 28–31, 42, 45, 55, 58, 107, 110, 164,
 232, 239
Sizes and Distances of Sun and Moon 28–9,
 37–40, 56, 112
 Aristotle 5n.6, 8n.9, 23, 133–4, 148, 191, 232–3
Physics 5
 arithmetic 8n.9, 30
 Asclepiades 221, 224–5
 astrology 186, 188
 astronomy 5, 28–9, 32–3, 35, 54, 85n.21, 92n.26,
 112, 127–8, 133, 136, 144, 151–2, 164,
 169–71, 176n.1, 179–87, 221–2, 238–9

Athenaeus 196
 Athens 234
 Attalus (astronomer) 168–9, 171, 173
 Attic dialect 5n.6
 Autolyclus 54, 107, 182–3, 232–3
 axiomatics 13, 80

Bakhtin, M.M. 17, 59, 61–2, 207
 Barker, A. 24n.12
 Basilides of Tyre 93
 Bing, P. 200n.44
 Bogue, P. 176n.1
 Borges, J.L. 205
 Bornman, F. 201 nn.47–8
 botany 188n.23, 218
 Bourdieu, P. 228n.63
 Bowen A.C. 127n.10
 Brassens, G. 201n.49
Bucolic Genre 151, 156
Burning Mirrors, *see* Diocles
 Burnyeat, M.F. 23n.10

Callimachus 33n.19, 59–60, 151–2, 175, 178–81, 193–6, 198, 200–8, 212–16, 221, 233–5, 237–8, 240
Aitia 151, 178, 194, 206, 212–13, 216, 238
Epigrams 214
Hecale 213–15
Hymn, 3 (Artemis) 200–8, 213, 215–16
Hymn, 4 (Delos) 193–4, 213, 215
Hymn, 5 (Bath of Pallas) 213
Lambi 194–5, 213–14
 Cameron, A. 60n.41, 65, 214, 238n.14
 catenarism 179, 181, 184, 187–8 *see also* *Lock of Berenice*
 Callixenus of Rhodes 59n.40
Cattle Problem, *see* Archimedes
 Catullus 151, 178–9
 center of gravity 40
 Chemla, K. 42n.26, 46
 Chinese mathematics 46, 48
 Chrysippus 34–5, 166
 Cicero 66, 182n.10, 197, 199n.41
 cissoid 152–3, 155, 159
 Cleanthes 240
 Cleary, J.J. 134n.13
 Cleomedes 54–5
 cochlias 154
 cochloid, 155, *see* conchoid
Codex Constantinopolitanus (Hero) 47 n.32
 Colossus 60
 combinatorics 19–20, 34, 145, 166
 conchoid 142–4, 152–3, 155

Index

cone 12, 139, 148
 conic sections 76, 83, 88–9, 100, 118, 129–30, 133, 135, 139–40 *see also* ellipse, hyperbola, opposite sections, parabola
 conoid 3, 135, 152
Conoids and Spheroids, *see* Archimedes
 Conon 67, 101, 129, 151, 155, 179, 194, 238
 Couat, A. 183n.15, 210–12, 226, 236
 Ctesibius 86n.23, 159n.39
 Cullen, C. 46n.31
 Cuomo, S. xiii, 112n.39
 Cusset, C. 199
 Cutler, B. 20
 cylinder 120–2, 131, 148, 150

Decorps-Foulquier, M. 65
 definitions 8n.9, 98, 100–1
 Democritus 148
 Diaconis, P. 20
 diagrams 7, 38–9, 41, 43, 45, 47–51, 53, 74, 84, 86, 97, 101–3, 124, 137, 237
 didactic epic 104
 Dijksterhuis, E.J. 41, 63, 80n.15, 155n.29
 Diocles 75, 82–8, 91, 107, 132–3, 155, 239
Burning Mirrors 79, 82–7, 95, 99, 108
 Diogenes Laertius 196, 232n.4
 Dionysodorus 239
 Diophantus 46, 48, 113
 Djebbar, A. 65
 Doric dialect 63, 218n.59
 Dositheus 2–3, 67, 101, 103, 106, 129, 237
 Duhem, P. 128n.11

ecliptic 35
 Egyptian Mathematics 45–6, 48
 Eijk, P.J. van der 233n.7
 Einstein, A. 118
 ekphrasis 106, 163, 191–2
Elements, *see* Euclid
 ellipse 71–4, 117–18
 enunciation (as stylistic element in proofs) 84
 Epicurus 105
 epistolary form 104–5
 Eratosthenes 157, 159
 Eratosthenes 30, 35, 54–7, 85n.21, 103, 106, 111, 132, 150–1, 155, 159–65, 167, 171–3, 175–6, 178, 181–2, 195, 198, 228, 236–7, 239
 cube duplication, *see* two mean proportionals
 geography 171–3, 175–6
Hermes 181–2, 228–9
Platonicus 57, 163
Sieve 30, 58, 149–52, 155–6, 159
Two Mean Proportionals 108, 132, 160–4, 228–9

- erotic poetry 151
 Euclid 12, 48, 61, 64, 78, 82, 94, 100, 102, 110,
 115–17, 120, 139, 196, 232–4, 239
Catoptrics 134–5
Data 108, 123
Elements 21, 43, 65, 74, 81, 98, 107, 109, 113,
 115, 118, 123–4, 125n.8
Book I 47, 98, 102–3
Book II 195
Book IV 148
Book V 149
Book VI 149
Book IX 30
Book X 50, 61n.45, 78, 93, 108, 149
Book XI 149
Book XIII 148–9
Book XIII 61n.45, 82, 91, 93, 95, 108–9, 112,
 115–17, 148–9
 “*Book XIV*,” see Hypsicles
Optics 134
Spherics 183
 Eudemus (correspondent of Apollonius of Perga)
 99–100, 237
 Eudemus (historian of science) 195n.32
 Eudoxus 5n.6, 56n.38, 67, 148, 162–3, 168–71,
 182–5, 189, 223, 237
 Eutocius 8n.9, 29, 42, 57, 75 nn.9–10, 99, 106,
 111, 113, 123, 151, 157, 160
 Ezekial (dramatist) 224

 Fakas, C. 182n.12
 Fantuzzi, M. 168n.44, 175, 206, 208n.51, 211–12,
 214–26, 235n.11
 formulaic language 38, 97, 123–4
 Fowler, D.H.F. 42
 Fraser, P. 187, 236n.12, 238n.14
 Fried, M. 120n.6, 140n.17
 Funkenstein, A. 142n.19

 Galen 112, 157, 158n.38, 233
 Galison, P. 228–9
 Gardies, J.L. 43n.29
 Gee, E. 182
 Gelon 106, 164, 167, 237
 Geminus 111
 geography 171, 177–8, 181, 192–3,
 216
 Glucker, J. 110n.36
 Goldstein, B. 127n.10
 Goldstein, R. 102n.30
 Goodman, N. 141
 Gorgias 235
 Grasshof, G. 33n.21, 42n.27
 Green, P. 59–60
 Gutzwiller, K. 178, 180

 Harder, M.A. 205
 Heath, T.L. 79
 Heiberg, J.L. 17, 19, 63–4, 75n.9, 79, 101,
 103
 Helden, A. Van. 29n.15
 Henderson, J.A. 56. n.38
 Hero 48, 64–5, 86n.23, 111
Metrica 47, 63
 Herodas 221–2
 Herodotus 176–7
 Herophilus 157–9, 194, 233
 Hesiod 105n.32, 168, 183–5, 233
 Hesychius 215
 Hipparchus 19–20, 29, 33–5, 56. n.38, 58, 110, 112,
 166, 168–71, 173, 182, 185, 233n.6, 239
 Hippias (author of *quadratrix*) 141, 144
 Hippocrates of Chios 148, 150n.23, 161–2, 232–4
Quadrature of Lunules 148
 Hippocratic Corpus 233–4
 Hipponax 194–5, 213
 hippopede 150n.23
 Homer 52n.34, 165, 167, 171–3, 176, 200, 213–15,
 218, 221, 226, 234
 Horace 198–9
 Hoyrup, J. 65
 Hubbard, M. 165n.43, 198
 Huffman, C.A. 23n.10, 232 nn.2–3
 Hunter, R. 175, 183n.14, 206, 211–12, 214–26,
 235n.11
 Hutchinson, G.D. 175, 212–14, 216–26
 Hypatia 113
 hyperbola 89, 140–1
 Hypsicles 92–100, 102, 107, 110, 157, 239
Anaphoricon 92n.26, 157
 “*Elements XIV*” 92–7, 108, 112

 Immhausen, A. 46
 indivisibles 131
 inequalities 25–7, 32, 39, 42, 71, 119
 intertextuality 92–5, 102
 introductions (as literary genre) 2–4, 9, 67, 78,
 83, 88, 91–107

 Jacques, J.M. 239
 Jaeger, M. 66n.2, 198n.40
 Jones, A. 188n.24

 Kassel, R. 234
 Kepler, J. 146, 182
 Kidd, I.G. 55n.37, 182n.12
 Knorr, W.R. 1–2, 21, 23, 43n.29, 63–5, 126,
 127n.9, 134n.14, 141n.18, 142n.19,
 148n.20, 152–3, 155n.29, 238n.16
 Köhnken, A. 239n.20
 Koine dialect 5n.6, 63

- Konstan, D. 104–5, 194n.31
Kroll, W. 136n.16, 211, 226, 236
- Lai, A. 197, 198n.39
Landels, J.G. 135n.15
Laplace, P.S. 183n.15
Lavigne, D. 191n.28
Lloyd, G.E.R. 128, 158n.38
Lock of Berenice 151–2, 155, 178–80, 188, 238 *see also* Callimachus, *Aitia*
Lucian 182n.10
Lycophron 221, 223–5
- Martin, J. 169, 182 nn.11, 13
Martin, R. 187 nn.20, 22
Measurement of Circle, *see* Archimedes
mechanics 86–7, 104, 129–33, 142–4, 159, 162–3
medicine 157–9, 192–4, 197, 218, 233
Meleager 188n.23, 197–8
Menaechmus 162–3
Menander 234
Mendell, H. 63
Menelaus 112n.38
Method, *see* Archimedes
Meyer, D. 176n.1
Mitchel, J. 52n.34
Moscow Mathematical Papyrus 45–6, 48
Most, G. 193
Mueller, I. 30n.17
music 8n.9, 23–4, 34, 133
Mykonos 102n.30
- Nabokov, V. 208n.52
Nagy, G. 64
Nature Magazine 102n.30
Naucratis 99–100
Nicanor 182n.11, 189, 192
Alexipharmaca 189
Theriaca 189–90, 193
Nicias of Miletus 197–8, 218–19
Nicomachus 30, 112, 149
Arithmetic 149
Nicomedes 99, 142–3, 153, 155, 159
Nightingale, A. 234n.9
Nine Chapters, The 46, 48
Nisbet, R.G.M. 165n.43, 198
Nishimura-Jensen J.M. 218n.58
- Obbink, D. 171n.47
opposite sections 89, 140–1, 152
optics 8n.9, 83–4, 133–4
Orpheus 52n.34
d'Orville, 301 Ms. (Euclid) 47
Otterlo W.A.A. van 124n.7
Ovid 189n.26
- Packard, D.W. 52n.34
Palimpsest, the Archimedes 17, 232n.5
panegyric 151
Pappus 44, 49–54, 108, 113, 141n.18, 146, 155n.29, 156
Collection 43n.29, 112n.38, 126–7, 166–7
parabola 49, 75–8, 84, 103, 122, 129–31
paraboloid 85, 87, 132
paradoxography 190–1, 193
pedagogy 13, 108–9, 111–15, 123, 234
perfect numbers 30n.17
Pergamon 99, 237
Pfeiffer, R. 179n.4, 195, 199n.41
Phaenomena, *see* Aratus
Pharos 60, 158
Philo of Byzantium 86n.23
Philo of Gadara 29
Philodemus 171n.47
Philolaus 23
physics 4–5, 8, 12–13, 15
Pindar 32, 165–6
Planes in Equilibrium, *see* Archimedes
Plantinga M. 200n.43
Plato 8n.9, 23, 35, 62, 102n.30, 133, 162, 171n.47, 172, 232, 234
Pleiades 187–8, 224
Pliny the Elder 33
Plutarch 19, 163, 164n.42, 166, 196, 233n.6, 240n.26
poikilia 17, 19, 136, 146, 226
Poincaré, H. 228
polyeidia 214, 220
Porphyry 196n.35
Posidippus 60n.43, 190–2, 225–6, 239
Posidonius 54–8, 110
prime numbers 30, 150
Proclus 113, 141n.18, 150n.23, 152, 155n.28, 232n.5
Protarchus 93
pseudepigraphy 64
Pseudo-Apollodorus 172
Pseudo-Justinus Martyr 52n.34
Ptolemaic monarchy 55, 57, 106, 151, 161, 163, 181, 187, 225–6, 232, 237–9
Ptolemy (scientist) 29, 42, 112–13, 127, 152
Almagest 33, 35 42n.27, 112
Puelma, M. 178n.3
Pythagoras 195–9, 213
Pythagoreanism 23
Pytheas 56
- Q.E.D. 123–4
Quadratrix 141–2, 144, 155

- Rabelais 207
regular solids 82, 92, 94, 115–16,
149
Reynolds L.D. 64
Rhodes 54–6
ring composition 124, 165
Rochberg, F. 188n.24
Romano, A. 191n.28
Rufus 158
- Saito, K. 43, 232n.5
Salinon 147, 156
Sand-Reckoner, see Archimedes
Schneider, I. 232n.5
Sedley, D. 5n.6
Selden, D.L. 211–12
Sesiano, J. 64, 83n.17
Sicily 167–8
Sidoli, N. 67
Simplicius 148n.21, 150n.23
Siu, M.K. 48n.33
Solmsen, F. 176n.1
Sophistic movement 234
sphere 49, 66–70, 86–7, 104, 132
spherics 183, see also Euclid, Theodosius
Sphere and Cylinder, see Archimedes
spheroid 152
Spiral Lines, see Archimedes
Staden, H. von 158–9
Stephens, S. 181, 211–12, 236
stereometry 8n.9
Stirewalt M.L. Jr. 105
Stoics 19, 172, 182n.12, 183n.16, 186n.18
Stomachion, see Archimedes
Strabo 171–2, 187
Suàn Shù Shū 46n.31
Suda 157, 236n.12
Suppes, P. 80n.15
surveys 108–9, 111
Syene 55
Syracuse 106, 164, 199n.41, 218, 237
Syracusia 60n.44
- Taisbak, C.M. 93, 108, 148n.20
Taliaferro, R.C. 89
Tarn, W.W. 188n.25
- Thabit bin Qurra 148
Thales 194–6, 198–9, 213
Theocritus 150n.24, 165, 168n.44, 197–8, 207n.51,
218–22, 235, 239–40
Theodosius 109, 157n.36
Spherics 109, 112n.38, 183
Theon of Alexandria 113
Theon of Smyrna 29n.16, 163, 164n.42
Theophrastus 168, 185, 189, 191
Theriaca, see Nicander
Thesleff, H. 64
Thiel, D. 233n.6
toolbox of results 43, 74, 75n.9
Toomer, G.J. 72, 83–4, 86n.22–3, 112n.40,
239n.21
two mean proportionals 132–3, see also under
Eratosthenes
Tybjerg, K. 86n.23
Tycho Brahe 151
Tzetzes 236n.12
- Uhrmeister, V. 200n.44
Unguru, S. 120n.6, 140n.17
- Vat. Gr. 218 Ms. (Pappus) 50, 155n.29
Virgil 189
Vitrac, B. 125n.8, 238n.16
Vitruvius 196
Volkov, A.K. 48n.33
- West, S.R. 224
Willamowitz-Moellendorff, U. von 161n.41
Wilson, N.G. 64
- Xenocrates 233n.6
Xenomedes 212
- Young, G. de 47n.32
- Zagagi, N. 234n.8
Zanker, G. 178n.2, 193
Zetzel J.E.G. 64
Zeuthen, H.G. 120n.6
Zeuxippus 106
Zhmud, L. 195n.32
zoology 190