

Mathematical works in the Edward Worth Library (98 items).

1. Agricola, Georg, *De mensuris & ponderibus Romanorum atque Graecorum lib. V*
De externis mensuris ... lib. II Ad ea, quae Andreas Alciatus denuo disputauit ..., breuis defensio lib. I De mensuris ... lib. I De restituendis ponderibus atq; mensuris lib. I De precio metallorum & monetis lib. III. (Basle, 1550).
2. Alexander, Johannes, *A synopsis of algebra. Being the posthumous work of John Alexander, of Bern in Swisserland. To which is added an appendix by Humfrey Ditton. For the Use of the Two Mathematical Schools in Christ's Hospital, London. Done from the Latin by Sam. Cobb, M. A.* (London, 1709).
3. Alsted, Johann Heinrich, *Methodus admirandorum mathematicorum: novem libris exhibens universam mathesin authore Johan-Henrico Alstedio* (Herborn, 1641).
4. Anon, *Divers ouvrages de mathematique et de physique par messieurs de l'Academie royale des sciences* (Paris, 1693).
5. Anon, *Veterum mathematicorum Athenaei, Apollodori, Philonis, Bitonis, Heronis, et aliorum opera : nunc primum edita, ex manuscriptis codicibus Bibliothecae Regiae* (Paris, 1693).
6. Anon, *Recueil de diverses pieces, sur la philosophie, la religion naturelle, l'histoire, les mathematiques, &c. Par Mrs. Leibniz, Clarke, Newton, & autres autheurs celebres* (Amsterdam, 1720).
7. Apollonius of Perga, *Apollonii Pergæi Conicorum libri quattuor vñà cum Pappi Alexandrini lemmatibus, et commentariis Eutocii Ascolonitae. Sereni Antinsensis philosophi libri duo nunc primum in lucem editi. Quæ omnia nuper Federicus Commandinus ... è Græco conuertit & commentariis illustravit* (Bologna, 1566).
8. Apollonius of Perga, *Apollonii Pergæi de sectione rationis libri duo ex arabico msto. latine versi. Accedunt ejusdem de sectione spatii libri duo restituti. Opus Analyseos Geometricæ studiosis apprime Utile. Præmittitur Pappi Alexandrini præfatio ad Viuum collectionis mathematicæ, nunc primum Græce edita: Cum Lemmatibus*

ejusdem Pappi ad hos Apollonii Libros. Opera & studio Edmundi Halley Apud Oxonienses Geometriae Professoris Saviliani (Oxford, 1706).

9. Archimedes, [Archimedous panta sozomena] = *Archimedis opera quae extant, nouis demonstrationibus commentariisque illustrata ; per Dauidem Riualtum a Flurantia Coenemanum, è regia turma sacri cubiculi, santioribusque regni consiliis & à literarum pietatisque studiis Christianissimi Gallorum & Nauarrai Regis Ludouici XIII. semper augusti. Operum catalogus sequenti pagina habetur* (Paris, 1615).
10. Archimedes, *Archimedis Opera: Apollonii Pergæi Conicorum libri IIII. Theodosii Sphærica: methodo nova illustrata, & succinctè demonstrata. Per Is. Barrow, exprofessorem Lucasianum Cantab. & Societatis Regiæ Soc.* (London, 1675).
11. Archimedes, *Archimedis Opera non nulla à Federico Commandino Vrbinate nuper in Latinum conuersa, et commentariis illustrata. Quorum nomina in sequenti pagina leguntur* (Venice, 1558).
12. Baker, Thomas, *The geometrical key, or, The gate of equations unlock'd a new discovery of the construction of all equations, howsoever affected, not exceeding the fourth degree, viz., of linears, quadratics, cubics, biquadratics..* (London, 1684).
13. Barrow, Isaac, *Lectiones opticæ & geometricæ: in quibus phænomenon opticorum genuinæ rationes investigantur, ac exponuntur: et generalia curvarum linearum symptomata declarantur. Auctore Isaaco Barrow, Collegii SS. Trinitatis in Academia Cantab. præfecto, et Societatis Regiæ sodale* (London, 1674).
14. Bettini, Mario, *Aerarium philosophiae mathematicae in quo elementa philosophiae geometricæ de planis, curvis, & solidis figuris : applicata, et ornata usibus exijmis in omni scientiarum, & artium genere, novis praxibus, paradoxis, locis Aristotelicis, & aliorum philosophorum, & scitorum, corollarijs, scholijs, eruditioñibus, mortalitatibus, demonstrationibus novis, facillimis, & universalissimus confirmata authore Mario Bettino* (Bologna, 1648).
15. Boulliau, Ismael, *De lineis spiralibus demonstrationes nouae* (Paris, 1657).
16. Boulliau, Ismael, *Exercitationes geometricæ tres : I. Circa demonstrationes per inscriptas & circumscriptas figuras. II. Circa conicarum sectionum quasdam*

propositiones. III. De porismatibus. Astronomiae philolaicæ fundamenta clariùs explicata, & asserta aduersùs clariss. viri Sethi Wardi Oxoniensis professoris impugnationem (Paris, 1657).

17. Ceulen, Ludolf van, *De circulo et adscriptis liber. In quo plurimorum polygonorum latera per irrationalium numerorum griphos, quorum libet autem per numeros absolutos secundum algebraicarum æquationum leges explicantur quæ insuper accesserunt pagina versa indicabit. Omnia é vernaculo latina fecit, et annotationibus illustravit Willebrordus Snellius ...* (Leiden, 1619).
18. Ciermans, Jean, *Disciplinæ mathematicæ traditæ anno institvtæ Societatis Iesv seculari a P. Ioanne Ciermans ...* (Louvain, 1640).
19. Clavius, Christoph, *Opera mathematica V. tomis distributa : ab auctore nunc denuo correcta, et plurimis locis aucta* (Mainz, 1611).
20. Collins, John, *The sector on a quadrant, or A treatise containing the description and use of four several quadrants; two small ones and two great ones, each rendred many wayes, both general and particular. Each of them accomodated for dyalling; for the resolving of all proportions instrumentally; and for the ready finding the hour and azimuth universally in the equal limbe. Of great use to seamen and practitioners in the mathematicks. Written by John Collins accountant philomath. Also An appendix touching reflected dyalling from a glass placed at any reclinacion* (London, 1659).
21. Collins, John, *The mariners plain scale new plain'd: or, a treatise shewing the ample uses of a circle equally divided, or of a line of chords and equal parts, divided into three books or parts... To which may also be added a treatise of the authors, of dyalling by a line of chords, formerly published* (London, 1659).
22. Collins, John, *Commercium epistolicum D. Johannis Collins, et aliorum, de analysi promota, jussu Societatis Regiæ in lucem editum: et jam Una cum ejusdem Recensione praemissa, & Judicio primarii, ut ferebatur, Mathematici subjuncto, iterum impressum* (London, 1722).
23. Commandino, Federico, *Liber de centro gravitatis solidorum* (Bologna, 1565).

24. Dechales, Claude François Milliet, *Cursus seu Mundus mathematicus* (Lyon, 1690).
25. Denys, G., *L'art de naviger perfectionné par la connaissance de la variation de l'aimant* (Dieppe, 1666).
26. Descartes, René, *Geometria à Renato Des Cartes anno 1637 Gallicè edita; postea autem unà cum notis Florimondi de Beaune ... Gallicè conscriptis in Latinam linguam versa, & commentariis illustrata, opera atque studio Francisci à Schooten* (Amsterdam, 1659).
27. Descartes, René, *Renati Descartes epistolæ partim ab auctore Latino sermone conscriptæ, partim ex Gallico translatæ. In quibus omnis generis quæstiones philosophicæ tractantur, & explicantur plurimæ difficultates quæ in reliquis ejus operibus occurrunt. Pars prima.[-secunda.]* (Amsterdam, 1668).
28. Descartes, René, R. *Des-Cartes Opuscula postuma, physica et mathematica* (Amsterdam, 1701).
29. Diophantus of Alexandria, *Arithmetoricorum libri sex, et de numeris multangulis liber unus. Nunc primùm Graecè & latinè editi, atque absolutissimis commentariis illustrati, auctore Claudio Gaspare Bacheto...* (Paris, 1621).
30. Drelincourt, Charles, *De partu octimestri vivaci diatribe* (Leiden, 1680).
31. Du Hamel, Jean-Baptiste, *Regiae scientiarum académiae historia : in qua praeter ipsius académiae originem & progressus, variasque dissertationes & observationes per triginta annos factas, quām plurima experimenta & inventa, cum physica, tum mathematica in certum ordinem digeruntur* (Paris, 1698).
32. Euclid, *Eukleidou stoicheion biblia ig. = Elementorum Euclidis libri tredecim. Secundum vetera exemplaria restituti. Ex versione Latina Federici Commandini aliquam multis in locis castigata* (London, 1620).
33. Euclid, *Euclidis Elementorum libri xv. breviter demonstrati, opera Is. Barrow, Cantabrigiensis, Coll. Trin. Soc...* (London, 1659).
34. Euclid, *Eukleidou ta sozomena. = Euclidis quæ supersunt omnia. Ex recensione Davidis Gregorii* (Oxford, 1703).

35. Everard, Thomas, *Stereometry or, the art of gauging made easie by the help of a new sliding-rule* (London, 1702).
36. Fontenelle, Bernard le Bovier, *Histoire du renouvellement de l'académie royale des sciences en M.DC.XCIX. et les éloges historiques de tous les académiciens morts depuis ce revouvellement : avec un discours préliminaire sur l'utilité des mathématiques et de la physique* (Amsterdam, 1709).
37. Gravesande, Willem 's, *Essai de perspective* (The Hague, 1711).
38. Gregorius a Sancto, Vincentio, *Opus geometricum quadraturae circuli et sectionum coni. Decem libris comprehensum* (Antwerp, 1647).
39. Guglielmini, Domenico, *Opera omnia mathematica, hydraulica, medica, et physica accessit vita authoris, a Jo. Baptista Morgagni ...*(Geneva, 1719).
40. Harriot, Thomas, *Artis analyticae praxis* (London, 1631).
41. Hero of Alexandria, *Heronis Ctesibii Belopoeeca, hoc est, Telifactiva Bernardino Baldo vrbinate Gvastallæ abbate illvstratore et interprete ; item Heronis vita eodem avctore* (Augsburg, 1616).
42. Hobbes, Thomas, *Elements of philosophy, the first section, concerning body. Written in Latine by Thomas Hobbes of Malmesbury. And now translated into English. To which are added Six lessons to the professors of mathematicks of the institution of Sr. Henry Savile, in the University of Oxford* (London, 1656).
43. Huygens, Christiaan, *Theoremata de quadratura hyperboles, ellipsis et circuli, ex dato prtionum gravitatis centro. Quibus subjuncta est Exegesis cyclometriae Cl. Viri Gregorii a S. Vincentio, editae anno MDCXLVII* (Leiden, 1651).
44. Huygens, Christiaan, *De circuli magnitudine inventa. : Accedunt ejusdem Problematum quorundam illustrium constructiones* (Leiden, 1654).
45. Huygens, Christiaan, *Opera varia* (Leiden, 1724).
46. Huygens, Christiaan, *Opera reliqua* (Amsterdam, 1728).
47. Kepler, Johannes, *Chilias logarithmorum : ad totidem numeros rotundos : praemissa demonstratione legitima ortus logarithmorum eorum[que] usus quibus nova traditur arithmeticæ, seu compendium, quo post numerorum notitiam nullum nec*

admirabilius, nec utilius solvendi plera[que] problemata calculatoria, praesertim in doctrina triangulorum, citra multiplicationis, divisionis, radicum[que] extractionis, in numeris prolixis, labores molestissimos (Marburg, 1624).

48. Kersey, John, *The elements of that mathematical art commonly called algebra, expounded in four books* (London, 1673).
49. Kersey, John, *The third & fourth books of the elements of algebra* (London, 1674).
50. Kircher, Athanasius, *Magnes siue de arte magnetica opvs tripartitvm : quo praeterquam quod vniuersa magnetis natura, eiusque in omnibus artibus & scientijs vsus noua methodo explicetur, è viribus quoque & prodigiosis effectibus magneticarum, aliarumque abditarum naturae motionum in elementis, lapidibus, plantis & animalibus elucescentium, multa hucusque incognita naturæ arcana per physica, medica, chymica & mathematica omnis generis experimenta recluduntur* (Rome, 1641).
51. La Hire, Philippe de, *Description et explication des globes qui sont placés dans les pavillons du Château de Marly, par ordre de sa Majesté* (Paris, 1704).
52. La Hire, Philippe de, *Description et explication des globes qui sont placés dans les pavillons du Château de Marly, par ordre de sa Majesté* (Paris, 1704).
53. La Hire, Philippe de, *Sectiones conicae in novem libros distributae : in quibus quidquid hactenus observatione dignum cùm à veteribus, tūm à recentioribus geometris traditum est, novis contractisque demonstrationibus explicatur; multis etiam & exquisitis propositionibus rece`ns inventis illustratur. Accesserunt sectiones pyramidum super basibus parabolicis ellipticis, & hyperbolicis . . . Adjecta demum est brevis expositio propositionum septem librorum conicorum Apollonii Pergaei* (Paris, 1685).
54. Leybourn, William, *The art of numbring by speaking-rods: vulgarly termed Nepeirs bones. By which the most difficult parts of arithmetick, as multiplication, division, and extracting the roots both square and cube, are performed with incredible celerity and exactness (without any charge to the memory) by addition and subtraction only* (London, 1667).

55. L'Hôpital, Guillaume François Antoine, Marquis de, *Traité analytique des sections coniques et de leur usage pour la resolution des equations dans les problèmes tant déterminez qu'indéterminez ouvrage posthume de M. le marquis de l'Hôpital, Academicien Honoraire de l'Academie royale des sciences* (Paris, 1707).
56. L'Hôpital, Guillaume François Antoine, Marquis de, *Analyse des infiniment petits : pour l'intelligence des lignes courbes* (Paris, 1696).
57. MacLaurin, Colin, *Geometria organica: sive descriptio linearum curvarum universalis* (London, 1720).
58. Marolois, Samuel, *Mathematicvm opvs absolvissimum : continens geometriae, fortificationis, architecturæ, & perspectivæ theoreticæ ac practicæ regulas, demonstrationes, & figuræ perfectissimas studio atque opera Alberti Girardi ... ; recognitum ac multis notis illustratum* (Amsterdam, 1633).
59. Meibom, Marcus, *De proportionibus dialogus* (Copenhagen, 1655).
60. Mersenne, Marin, *Universae geometriae, mixtaeque mathematicae synopsis : et bini refractionum demonstratarum tractatus studio & operâ F.M. Mersenni M* (Paris, 1644).
61. Milnes, James, *Sectionum conicarum elementa nova methodo demonstrata* (Oxford, 1702).
62. Mizauld, Antoine, *Cometographia:... insuper catalogum visorum cometarum & ignitorum aeris spectrorum, vsque ad annum 1540 cum portentis & euentis quæ secuta sunt. Ad Reverendiss. Cardinalem A Castellionem* (Paris, 1549).
63. Montmort, Pierre Rémond de, *Essay d'analyse sur les jeux de hazard* (Paris, 1713).
64. Musschenbroek, Petrus van, *Physicae experimentales, et geometricae, de magnete, tuborum capillarium vitreorumque speculorum attractione, magnitudine terrae, cohaerentia corporum firmorum dissertationes, ut et Ephemerides meteorologicae Ultrajectinae* (Leiden, 1729).
65. Mydorge, Claude, *Prodromi catoptricorum et dioptricorum : siue conicorum operis ad abdita radii reflexi et refracti mysteria praeuij & facem praferentis* (Paris, 1631).

66. Newton, Sir Isaac, *Opticks: or, A treatise on the reflexions, refractions, inflexions and colours of light. Also two treatises of the species and magnitude of curvilinear figures* (London, 1704).
67. Newton, Sir Isaac, *Optice: sive de reflexionibus, refractionibus, infexionibus & coloribus lucis libri tres. Authore Isaaco Newton, Equite Aurato. Latine reddidit Samuel Clarke, A. M. Reverendo admodum Patri ac Dno Joanni Moore Episcopo Norvicensi a Sacris Domesticis. Accedunt tractatus duo ejusdem Authoris de Speciebus & Magnitudine Figurarum Curvilinearum, Latine scripti* (London, 1706).
68. Newton, Sir Isaac, *Arithmetica universalis; sive de compositione et resolutione arithmeticā liber. Cui accessit Halleiana æquationum radices arithmeticæ inveniendi methodus* (Cambridge, 1707).
69. Newton, Sir Isaac, *Philosophiæ naturalis principia mathematica* (Cambridge, 1713).
70. Newton, Sir Isaac, *Philosophiæ naturalis principia mathematica* (London, 1726).
71. Newton, Sir Isaac, *Arithmetica universalis : sive de compositione et resolutione arithmeticā liber* (Amsterdam, 1732).
72. Oughtred, William, *Opuscula mathematica hactenus inedita* (Oxford, 1677).
73. Ozanam, Jacques, *Dictionnaire mathematique, ou, Idée generale des mathematiques : Dans lequel l'on trouve, outre les termes de cette science, plusieurs termes des arts & des autres sciences; avec des raisonnemens qui conduisent peu à peu l'esprit à une connoissance universelle des mathematiques* (Paris, 1691).
74. Pappus of Alexandria, *Pappi Alexandrini Mathematicae collectiones à Federico Commandino Vrbinate in Latinum conuersae, & commentarijs illustratae* (Venice, 1588).
75. Pardies, Ignace Gaston, *Oeuvres de mathematiques : contenant les Elemens de geometrie, Discours du mouvement local, La statique et Deux machines propres à faire les cadrans* (The Hague, 1691).
76. Pitiscus, Bartholomaeus, *Bartholomæi Pitisci Grunbergensis Silesij, Trigonometriæ siue, De dimensione triangulor[um] libri quinque : item problematum varioru[m]*

nempe geodæticorum, altimetricorum, geographicorum, gnomonicorum, et astronomicorum: libri decem (Frankfurt, 1612).

77. Pitiscus, Bartholomaeus, *Bartholomæi Pitisci Grunbergensis silesij. Trigonometriæ, siue, De dimensione triangulos libri quinque. Item Problematum variorv[m] nempe geodæticorum, altimetricorum, geographicorum, gnomonicorum, et astronomicorum: libri decem* (Frankfurt, 1612).
78. Porta, Giambattista della, *Pneumaticorum libri tres : quibus accesserunt Curuilineorum elementorum libri duo* (Naples, 1602).
79. Prestet, Jean, *Nouveaux elemens des mathematiques ou Principes generaux de toutes les sciences : qui ont les grandeurs pour objet* (Paris, 1695).
80. Rast, Georg Heinrich, *De infinitis sectionibus conicis methodo nova geometrice delineandis* (Leipzig, 1717).
81. Rast, Georg Heinrich, *De infinitis sectionibus conicis methodo nova geometrice delineandis* (Leipzig, 1717).
82. Rohault, Jacques, *Oeuvres posthumes* (Paris, 1690).
83. Ryff, Peter, *Quaestiones geometricæ : in Euclidis et P. Rami Stoicheiosin. in vsum scholæ mathematicæ collectæ à doctore Petro Ryff ... quibus Geodesiam, adjecimus per vsum radii geometrici* (Frankfurt, 1621).
84. Steell, Robert, *A treatise of conic sections* (Dublin, 1723).
85. Stirling, James, *Lineæ tertii ordinis Newtonianæ, sive illustratio tractatus d. Neutoni de Enumeratione linearum tertii ordinis. Cui subjungitur, solutio trium problematum* (Oxford, 1717).
86. Theodosius, *Theodosiou Tripolítou Sphairikou bibliá 3 = : Theodosij Tripolitæ Sphæericorum, libri tres, nunquam antehac græce excusi. Iidem latinè redditæ per Ioannem Penam regium mathematicum, ad ... Carolvm Lotharingvm Cardinalem* (Paris, 1558).
87. Tunstall, Cuthbert, *De arte supputandi libri quatuor* (Paris, 1538).
88. Ursinus, Benjamin, *Trigonometria cum magno logarithmor. Canone* (Cologne, 1625).

89. Viète, François, *De aequationum recognitione et emendatione tractatus duo : quibus nihil in hoc genere simile aut secundum, huic aeuo hactenus visum* (Paris, 1615).
90. Vitale, Girolamo, *Lexicon mathematicum : hoc est rerum omnium ad uniuersam planè mathesim quoquo modo, directè, vel indirectè spectantium, collectio, et explicatio* (Paris, 1668).
91. Vossius, Gerardus Joannes, *De quatuor artibus popularibus : de philologia, et scientiis mathematicis, cui operi subjungitur, chronologia mathematicorum, libri tres* (Amsterdam, 1660).
92. Vossius, Gerardus Joannes, *De universae mathesios natura & constitutione liber : cui subiungitur chronologia mathematicorum* (Amsterdam, 1650).
93. Wallis, John, *Due correction for Mr Hobbes· Or Schoole discipline, for not saying his lessons right. In answer to his Six lessons, directed to the professors of mathematicks* (Oxford, 1656).
94. Wallis, John, *Opera mathematica* (Oxford, 1699).
95. Ward, John, *The young mathematician's guide* (London, 1719).
96. Wells, Edward, *Elementa arithmeticæ numerosæ et speciosæ. In usum juventutis academicae* (Oxford, 1698).
97. Whiston, William, *Sir Isaac Newton's mathematick philosophy more easily demonstrated: with Dr. Halley's account of comets illustrated. Being forty lectures read in the publick schools at Cambridge. By William Whiston, M. A. Mr. Lucas's, Professor of the Mathematicks in that University. For the Use of the Young Students there. In this English edition the whole is corrected and improved by the author* (London, 1716).
98. Wilkins, John, *Mathematical magick: or, The wonders that may be performed by mechanical geometry. In two books. Concerning mechanical powers. Motions* (London, 1691).

In addition to the above works there is much mathematical material in Worth's copies of the *Philosophical Transactions of the Royal Society* and the *Acta Eruditorum* of Leipzig.