

M2PM3 DRAMATIS PERSONAE: WHO DID WHAT WHEN

- Jean Robert Argand (1768-1822) in 1806: Argand diagram [I.1].
Georg Cantor (1845-1918): construction of the reals by Cauchy sequences in 1871 [I.1]; Cantor's theorem [I.2.7].
Girolamo Cardano (1501-1576): *Ars magna*, 1545, complex numbers [I.0].
Augustin Louis Cauchy (1789-1857): introduces Complex Analysis (1825-1829) [I.0]; Cauchy's General Principle of Convergence [I.2.8]; Root Test [I.2.11]; Cauchy-Riemann equations [II.2]; Cauchy's theorem [II.5]; Cauchy's integral formulae [II.6]; Cauchy's inequalities [II.6]; Cauchy-Taylor theorem [II.7]; Cauchy's Residue Theorem [II.11]; Cauchy density [III.4].
Richard Dedekind (1831-1916): construction of reals by Dedekind cuts, [I.1].
Leonhard Euler (1707-1783): Euler's formulae (for complex exponentials and trig functions) [I.1]; Euler's reflection formula $\Gamma(z)\Gamma(1-z) = \pi/\sin \pi z$ [II.8.4]; $\zeta(2) = \sum_1^\infty = \pi^2/6$ [III.7]; Euler's constant γ [III.8].
Augustus De Morgan (1806-1871): De Morgan's laws in 1870 [I.1].
Girard Desargues (1591-1661) in 1631: projective geometry [I.1].
Maurice Fréchet (1878-1942): metric spaces in 1906 [I.2].
Evariste Galois (1811-1832) in 1832: field extensions (and Galois theory) [I.1].
C. F. Gauss (1777-1855): Argand diagram in 1831 [I.1]; Gaussian density (or normal density), [III.2].
Edouard J.-B. Goursat (1855-1936): removed the assumption that f' is continuous in Cauchy's Theorem in 1884 [handout on Cauchy's Theorem].
George Green (1793-1841), *Essay on magnetism* in 1828: Green's theorem.
W. R. Hamilton (1805-1865): complex numbers as ordered pairs in 1837 [I.1].
Felix Hausdorff (1868-1942): General Topology in 1914 [I.2.4].
Camille Jordan (1838-1922): Jordan Curve Theorem in 1866 [handout on Cauchy's Theorem]; Jordan's Lemma [III.4].
Felix Klein (1849-1925): Riemann surfaces in 1882 [II.1.5, II.1.6].
Pierre-Alphonse Laurent (1813-1854): Laurent's theorem in 1843 [II.10].
Joseph Liouville (1809-1882): Liouville's theorem in lectures of 1847 (published by Cauchy, 1844) [II.6].
Giacinto Morera (1856-1909): Morera's theorem in 1889 [II.6].
J. von Neumann (1903-1957): set-theoretic definition of natural numbers [I.1].
Ptolemy, c. 160 AD: stereographic projection [I.1].
G. B. F. Riemann (1826-1866): Riemann integral in 1854 [I.0]; stereographic projection in 1851 [I.1]; Cauchy-Riemann equations [II.2]; Riemann surfaces in 1851 [II.1.5, II.1.6]; Riemann zeta function in 1859 [II.8.3, III.7].
Brooke Taylor (1685-1713): *Methodus incrementorum*, 1715; Taylor's theorem [I.0], Cauchy-Taylor theorem [II.7].
John Wallis (1616-1703), *Arithmetica infinitorum* in 1656: product for π [III.8].
Karl Weierstrass (1815-1897): Bolzano-Weierstrass theorem [I.2.3]; Weierstrass M-test [I.2.3]; analytic continuation [Soln3, II.8]; power-series approach to analytic/holomorphic functions, 1860s [II.7, II.8]; product for Γ in 1856 [III.8]; t -substitution [Problems 3].
Caspar Wessel (1745-1818) in 1799 (republ. 1895): Argand diagram [I.1].

