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(*b.* Clermont-Ferrand, France, 2 May 1588; *d.* Paris, France, 24 September 1651)

mathematics.

The son of Martin Pascal, treasurer of France, and Marguerite Pascal de Mons, Pascal married Antoinette Begon in 1616. They had three children: Gilberte (1620–1687), who in 1641 married Florin Périer; Blaise (1623–1662), the philosopher and scientist; and Jacqueline (1625–1661), who in 1652 entered the convent of Port-Royal.

Elected counselor for Bas-Auvergne in 1610, Pascal became president of the Cour des Aides in 1625. His wife died in 1626, and in 1631 he left Clermont to settle in Paris with his children. He devoted himself to his son's education while gaining a reputation as a talented mathematician and musician. In 1634 Pascal was one five commissioners named to examine J.B. Morin's "invention" for the determination of longitudes. As early as 1635 he frequented "Mersenne's academy" and was in contact with Roberval, Desargues, and Mydorge.

In November 1635 Mersenne dedicated to Pascal the "Traité des orgues" of his *Harmonie universelle* (1636). Roberval communicated to Pascal his first discoveries concerning the cycloid and intervened on his side in the debate concerning the nature of gravity (interpreting it in terms of attraction—letter to Fermat of 16 August 1636; Fermat's response of 23 August). At the beginning of 1637 Fermat wrote his "Solution d'un problème proposé par M. Pascal." At about the same time Pascal introduced a special curve, the conchoid of a circle with respect to one of its points, to be applied to the problem of trisecting an angle. Roberval called it the "limaçon de M. Pascal" and determined its tangent by his kinematic method. In February 1638 Roberval joined Pascal in defending Fermat's *De maximis et minimis*, which had been attacked by Descartes.

Having been obliged to return to Auvergne from March 1638 to April 1639, Pascal then moved to Rouen, where he was appointed intendant of the province, a post he held until 1648. He had given his son Blaise a solid foundation in mathematics, and he now fostered the development of his work, mainly through his contacts with many scientists. In October 1646 Pascal participated with his son and P. Petit in the first repetition in France of Torricelli's experiment. In April 1648 he joined in the debate between Blaise and the Père E. Noël concerning the problem of the vacuum. He returned to Paris in August 1648, was in Auvergne from May 1649 to November 1650, then spent his last months in Paris.

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II. Secondary Literature. Documents, notices, and details concerning the life and work of Pascal can be found in G.E., I, 5–28, 170–176, and II, 533–562; Mesnard, I, 459–464, 510–515, 571–576, 721–722, 727–729, 754–771, 1077–1079, 1091–1100, and II, 119–123, 157–163, 174–188, 217, 253–254, 841–863; the ed. of Descartes's *Oeuvres* cited above, index, V, 607; the ed. of Descartes's correspondence cited above, II, 379–381 and index; and Mersenne's correspondence cited above, vols. IV–VII, see index.

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