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W. E. BOYCE and R. C. DIPRIMA. — **Elementary differential equations and boundary value problems.** — Un volume relié pleine toile, $15,5 \times 23,5$, de 485 pages, avec figures. Prix: Sh. 68. — John Wiley, London, 1965.

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A few preliminaries. — Differential calculus. — Integral calculus. — Review. — Derivations. — Additional topics. — Review problems. — Tables.

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Elements of the calculus of variations: Introduction to the calculus of variations in one independent variable. — Generalized approach to the calculus of variations in one independent variable. — Introduction to the calculus of variations in two independent variables. — Generalized approach to the calculus of variations in two independent variables. — *Linearized supersonic flow:* Two-dimensional wings of minimum pressure drag. — Two-dimensional wings of minimum total drag. — Bodies of revolution having minimum pressure drag. — Three-dimensional wings of minimum pressure drag. — *Nonlinearized supersonic flow:* Second-order theory of optimum two-dimensional wings. — One-dimensional approach to optimum rocket nozzles. — General approach to optimum rocket nozzles. — *Newtonian hypersonic flow:* The Newtonian pressure law. — Slender shapes of minimum pressure drag. — Slender shapes of minimum total drag. — Optimum slender shapes with a variable skin-friction coefficient. — Nonslender bodies of revolution having minimum pressure drag. — Nonslender nose shapes of minimum pressure drag. — Effect of friction on optimum nonslender bodies of revolution. — Transversal contour of minimum pressure drag. — Transversal contour of minimum total drag. — Young's inequality and the problem of the optimum transversal contour. — Three-dimensional shapes of minimum total drag. — *Newton-Busemann hypersonic flow:* The Newton-Busemann pressure law. — Slender shapes of minimum pressure drag. — Nonslender shapes of minimum pressure drag. — Slender-body theory of flow around minimum drag shapes. — *Free-molecular flow:* Dynamics of free-molecular flow. — Optimum slender bodies. — Optimum nonslender bodies of revolution.

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Fundamental concepts and methods of mathematics: The axiomatic method. — Analysis of the axiomatic method. — Theory of sets. — Infinite sets. — Well-ordered sets; ordinal numbers. — The linear continuum and the real number system. — Groups and their significance for the foundations. — *Development of various viewpoints on foundations:* The early developments. — The Frege-Russell thesis: mathematics an extension of logic. — Intuitionism. — Formal systems; mathematical logic. — The cultural setting of mathematics.

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