Record Nr. UNINA9910455672703321 Autore Fischbein Efraim <1920-1998.> Titolo Intuition in science and mathematics [[electronic resource]]: an educational approach / / Efraim Fischbein Dordrecht, : Kluwer Academic Publisher, c1987 Pubbl/distr/stampa **ISBN** 1-280-20784-1 9786610207848 0-306-47237-6 Edizione [1st ed. 2002.] Descrizione fisica 1 online resource (241 p.) Mathematics Education Library, , 0924-4921; ; 5 Collana Disciplina 501 Soggetti Science - Philosophy Mathematics - Philosophy Intuition Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Includes index. The Theory -- Intuition and the Need for Certitude -- Intuition and Nota di contenuto Mathematical Reasoning -- Investigations in Overconfidence -- General Characteristics of Intuitive Cognitions -- The Classification of Intuitions -- Inferential Intuitions and Logical Reasoning -- Factors which Shape Intuitions -- Intuition and Experience -- The Practicalyty of Intuitive Meanings, Analysis of an Example: The Negative Numbers -- Factors of Immediacy -- Factors of Globality -- Intuition and Intuitive Models --Models and Analogies -- Paradigmatic Models -- Diagrammatic Models -- Phenomenological Primitives -- Conflicts and Compromises --Factors of Perseverance and Closure: The Primacy Effect -- Summary and Didactical Implications. In writing the present book I have had in mind the following objectives: Sommario/riassunto - To propose a theoretical, comprehensive view of the domain of intuition. - To identify and organize the experimental findings related to intuition scattered in a wide variety of research contexts. - To reveal the educational implications of the idea, developed for science and

mathematics education. Most of the existing monographs in the field of intuition are mainly concerned with theoretical debates - definitions,

philosophical attitudes, historical considerations. (See, especially the works of Wild (1938), of Bunge (1 962) and of Noddings and Shore (1 984).) A notable exception is the book by Westcott (1968), which combines theoretical analyses with the author's own experimental studies. But, so far, no attempt has been made to identify systematically those findings, spread throughout the research literature, which could contribute to the deciphering of the mechanisms of intuition. Very often the relevant studies do not refer explicitly to intuition. Even when this term is used it occurs, usually, as a self-evident, common sense term.