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Altri autori (Persone)	KilpatrickJeremy SwaffordJane FindellBradford
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Nota di contenuto	Cover -- Front Matter -- REVIEWERS -- ACKNOWLEDGMENTS -- PREFACE -- TABLE OF CONTENTS -- EXECUTIVE SUMMARY -- 1 LOOKING AT MATHEMATICS AND LEARNING -- 2 THE STATE OF SCHOOL MATHEMATICS IN THE UNITED STATES -- 3 NUMBER: WHAT IS THERE TO KNOW? -- 4 THE STRANDS OF MATHEMATICAL PROFICIENCY -- 5 THE MATHEMATICAL KNOWLEDGE CHILDREN BRING TO SCHOOL -- 6 DEVELOPING PROFICIENCY WITH WHOLE NUMBERS -- 7 DEVELOPING PROFICIENCY WITH OTHER NUMBERS -- 8 DEVELOPING MATHEMATICAL PROFICIENCY BEYOND NUMBER -- 9 TEACHING FOR MATHEMATICAL PROFICIENCY -- 10 DEVELOPING PROFICIENCY IN TEACHING MATHEMATICS -- 11 CONCLUSIONS AND RECOMMENDATIONS -- BIOGRAPHICAL SKETCHES.
Sommario/riassunto	Adding It Up explores how students in pre-K through 8th grade learn mathematics and recommends how teaching, curricula, and teacher education should change to improve mathematics learning during these

critical years. The committee identifies five interdependent components of mathematical proficiency and describes how students develop this proficiency. With examples and illustrations, the book presents a portrait of mathematics learning: Research findings on what children know about numbers by the time they arrive in pre-K and the implications for mathematics instruction. Details on the processes by which students acquire mathematical proficiency with whole numbers, rational numbers, and integers, as well as beginning algebra, geometry, measurement, and probability and statistics. The committee discusses what is known from research about teaching for mathematics proficiency, focusing on the interactions between teachers and students around educational materials and how teachers develop proficiency in teaching mathematics.
