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Sommario/riassunto	This book constitutes the joint refereed proceedings of the 16th Symposium on the Integration of Symbolic Computation and Mechanized Reasoning, Calculemus 2009 and the 8th International Conference on Mathematical Knowledge Management, MKM 2009, held in Grand Bend, Canada, as CICM 2009, the Conferences on Intelligent Computer Mathematics. The 10 revised full papers and 4 invited talks for Calculemus 2009 and 16 revised full papers and 6 short communications for MKM 2009 presented together with 4 joint invited talks were carefully reviewed and selected from a total of 51 submissions. The papers of Calculemus 2009 cover all aspects of the interplay of mechanized reasoning and computer algebra, as well as the development of integrated systems that transcend both computer algebra and theorem proving. The focus of MKM 2009 lies at the intersection of mathematics and computer science with the goal of developing effective techniques, based on formal mathematics and software technology. The realm of mathematical information is an attractive candidate for testing innovative theoretical and technological solutions for content-based systems, interoperability, management of machine understandable information, and the semantic Web.