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**ZMATH 2016a.00015****Høyrup, Jens****Algebra at the time of Babylon. When mathematics was written on clay. With a preface by Karine Chemla. (L'algèbre au temps de Babylone. Quand les mathématiques s'écrivaient sur de l'argile.)**

Inflexions. Paris: Vuibert/Adapt-SNES (ISBN 978-2-311-00001-6/pbk; 978-2-35656-016-2/pbk). xiv, 162 p. (2010).

The mathematical achievements of the Babylonians are, as a rule, underrated, although (or because?) much of what they did can be understood with a solid background in high school mathematics. Textbooks devoted to Babylonian mathematics suitable for the general reader are still rare: examples are [*K. Vogel*, *Vorgriechische Mathematik. II: Die Mathematik der Babylonier* (German). Hannover: Hermann Schroedel Verlag KG (1959; Zbl 0086.00208); *E. M. Bruins*, *Fontes Matheseos. Grundzüge des vorgriechischen und griechischen mathematischen Denkens* (Dutch; Flemish). Leiden: Brill (1953; Zbl 0052.24402); *R. Caratini*, *Les mathématiciens de Babylone* (French). Paris: Presses de la Renaissance (2002; Zbl 1326.01004); *P. S. Rudman*, *The Babylonian theorem. The mathematical journey to Pythagoras and Euclid*. Amherst, NY: Prometheus Books (2010; Zbl 1191.01003); *P. Yuste*, *Matemáticas en Mesopotamia* (Spanish). Madrid: Dykinson (2013; Zbl 1326.01008)]. The present book by one of the leading experts in this area is a welcome addition to this set. The introduction presents the sexagesimal system, as well as operations such as addition, subtraction, multiplication, division, squaring and taking square roots. The first chapter covers equations of the first degree by discussing problems from the cuneiform tablets TMS XVI # 1 and TMS VII # 2. The subsequent chapters present equations of the second degree from BM 13901, more involved equations of the second degree, e.g., from AO 8862, as well as applications to geometry (VAT 8512). The rest of the book deals with the question whether we may talk about Babylonian algebra in the first place. In the appendix, the author presents several examples of transliterations that the readers are invited to study. The author has taken part in improving the interpretation of Babylonian texts during the last 30 years, and he is aware that he is standing on the shoulders of giants: on p. 10, for example, he writes that “the interpretation of these texts made in the 1930s appears as a true heroic deed and remains an excellent first approximation”. This compares favorably with the attitude of other historians of mathematics who look down upon the pioneers of their field of expertise as “mathematicians who produced largely anachronistic accounts of ancient mathematics”. I fear that only very few high school students will pick up a book like this and study it on their own; but with some guidance they will discover a whole new world, a new way of looking at the mathematics they know. I strongly urge teachers to become familiar with this material – there is more to be learned from, e.g., this book than from the whole literature on didactics of mathematics in this century.

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