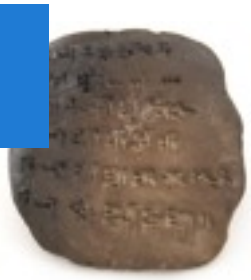
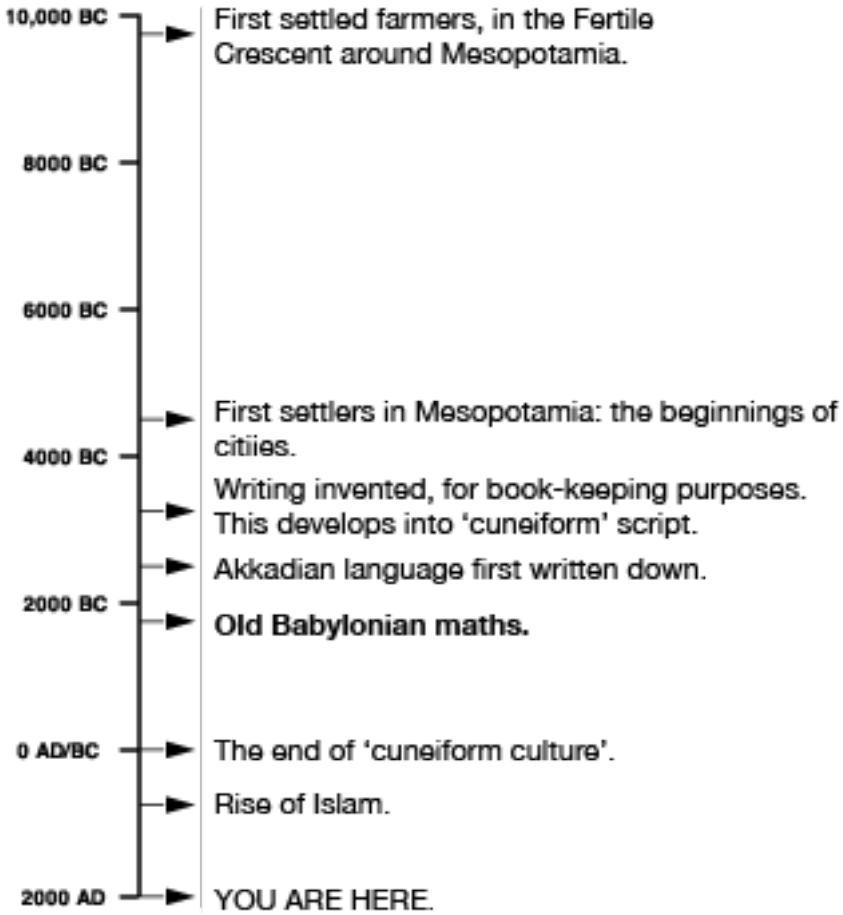
Babylonian Maths



Babylonian Mathematics

Babylonian timeline



BM 15285: an Old Babylonian 'textbook'

BM 15285 is a clay tablet with several geometry problems on it. It isn't known what its exact date is, or even exactly where it was found, although the style of writing means it must be from early second-millennium southern Mesopotamia, so between 2000 and 1500 BCE.

The fragments that we have were found at different times in the British Museum's collections - maybe more of it will be found one day! We think that the original tablet must have measured about 28 x 35 x 5 cm.

The columns should be read from left to right on the front, but from right to left on the back. There must have been 41 illustrated problems of which 30 remain, in whole or in part. Each consists of a description of the figures in the accompanying diagram, and the question, 'What are their areas?'

The text allows the figures to be restored, while the pictures enable technical terms to be identified. The diagrams are skew: Eleanor Robson says "Don't blame my drawing skills!"

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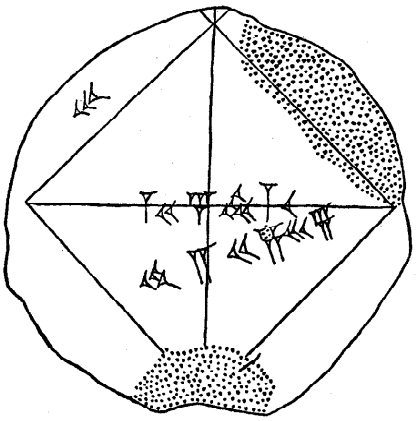
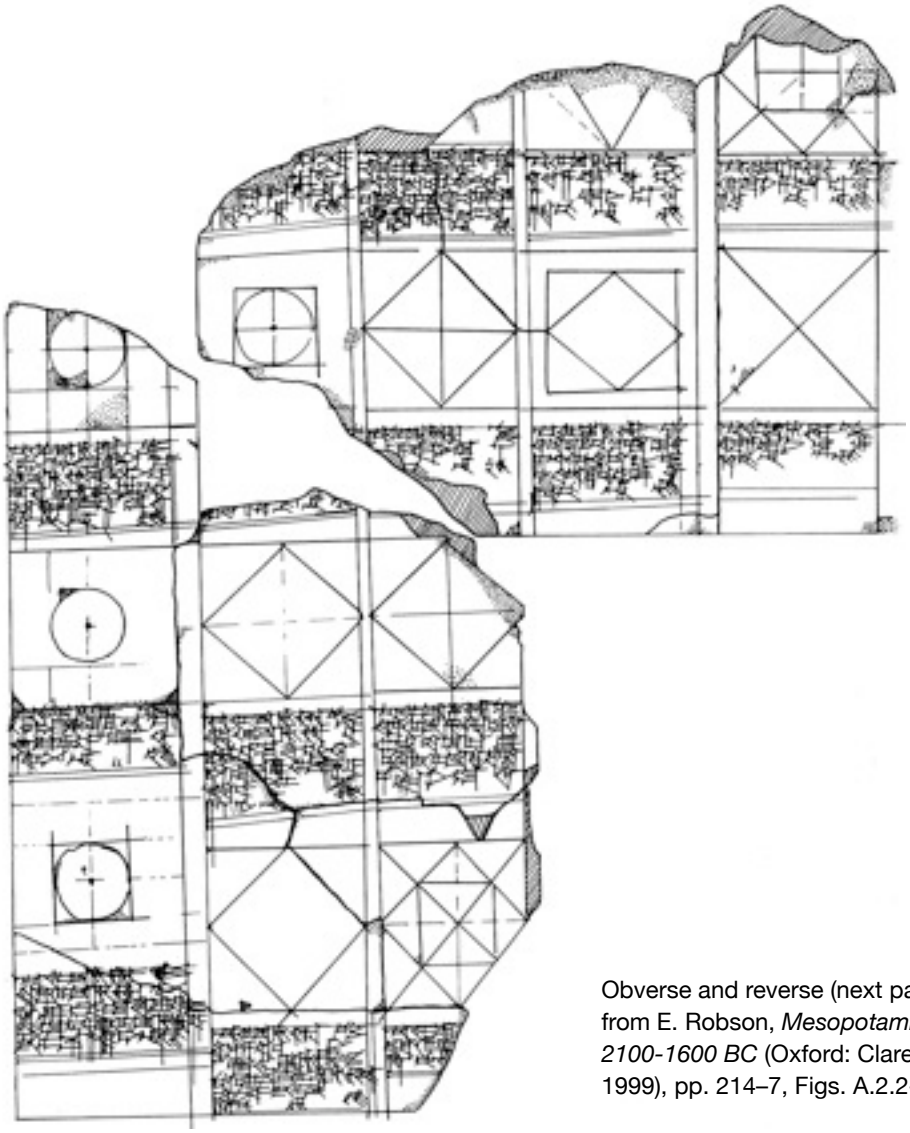
- There was no concept of angle and the back of the tablet is very convex.
- Each diagram is roughly 48 mm square, with horizontal and vertical guidelines dividing it into four smaller squares
- The circles were drawn with a fixed compass, about 11 mm in radius.

Students would have solved the problems on round ‘hand tablets’, so for instance on YBC 7289 (right) the student was finding the diagonal of a square of length 30.



YBC 7289, from Otto Neugebauer and Abraham Sachs, Mathematical Cuneiform

You can see some of the fragments we know about below and on the next page.



Obverse and reverse (next page) of BM 15285, from E. Robson, *Mesopotamian Mathematics, 2100-1600 BC* (Oxford: Clarendon Press, 1999), pp. 214–7, Figs. A.2.2-5

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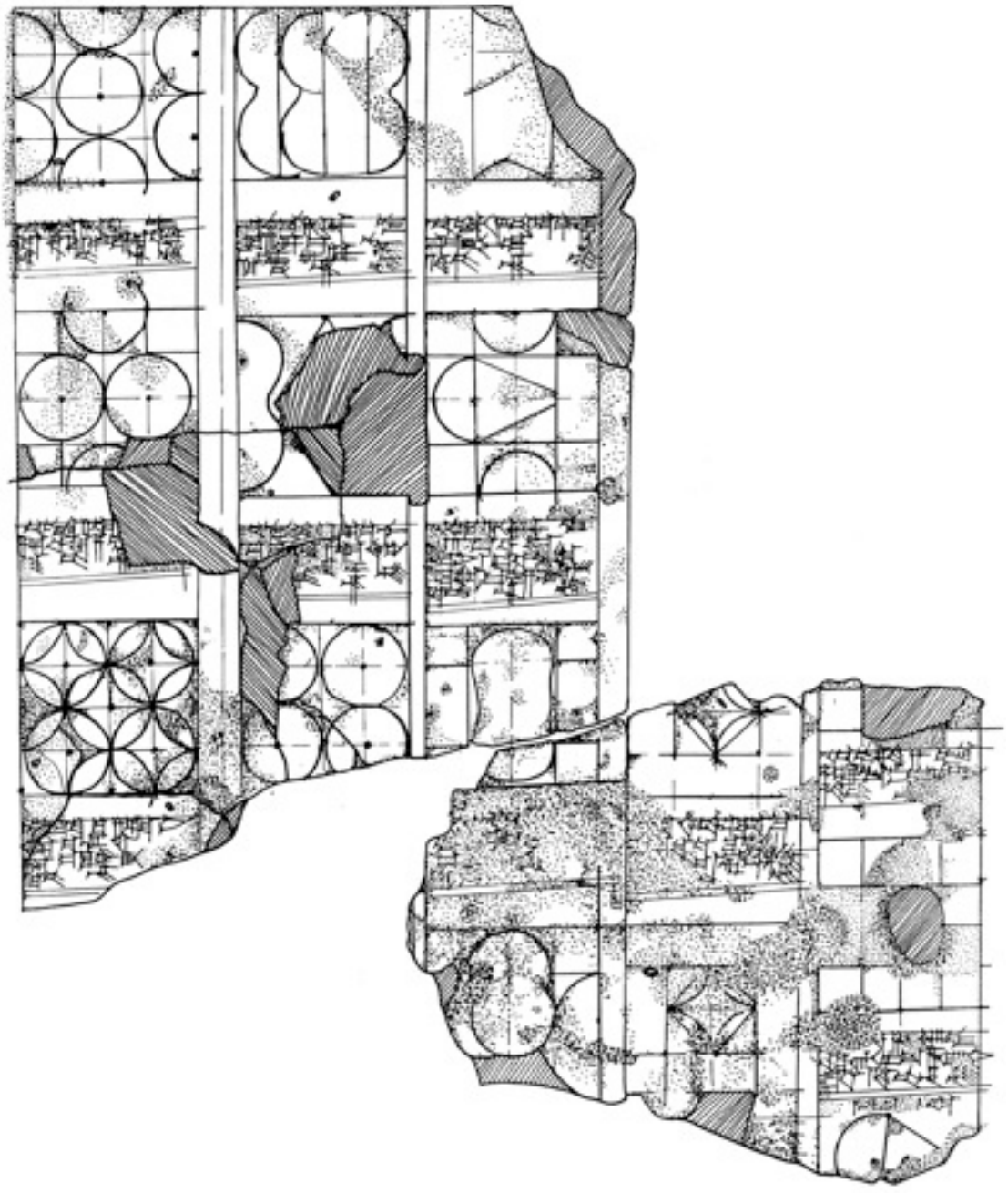

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