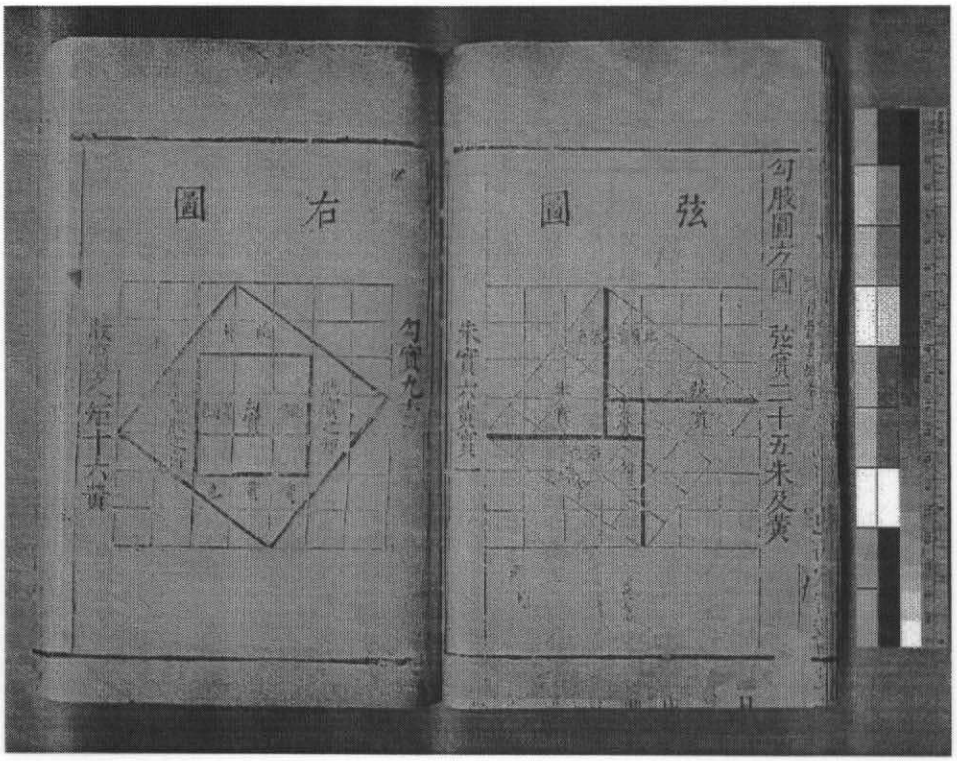
Zhoubi suanjing

These two pages are from the *Zhoubi suanjing* (*Arithmetical Classic of the Gnomon and the Circular Paths of Heaven*), a Chinese book on astronomy and mathematics dated to approximately 100 BCE. These images are from a Ming dynasty copy printed in 1603. These diagrams were added to the original text at some point an attempt to illustrate a dissection proof of the "Pythagorean Theorem", known by the Chinese as the *Gougu* theorem. A complete English translation and analysis of the *Zhoubi suanjing* is given by Christopher Cullen in his *Astronomy and mathematics in Ancient China: the Zhou bi suan jing* (Cambridge University Press, 1995). See, in particular, appendix one.



100 BC

On this page, the diagram on the right is usually called the "hypotenuse diagram" and illustrates the proof of the theorem in the 3-4-5 case. The diagram on the left shows how a square of side 3 fits into a square of side 5.