accepted calculation with irrationals but rejected −ve numbers.
interpreted squares, cubes of numbers gemetrically as areas, volumes etc
and gave geometric arguments to support the validity of manipulations but
had no well developed sense of proof.
Their algebra was entirely devoid of symbols, being purely rhetorical Eg
though it covered quadratic & some cubic equations.

N.B. al-jabr ⇝ algebra
= restoring, in this case the balance of an equation.
& was also applied to the art of bonesetting.

Separate single symbols for the numbers 1 to 9. Introduced a base 10 positional
notation. Wrote fractions as we do $\begin{smallmatrix} p \\ q \end{smallmatrix}$ without the bar & had rules much like
ours "to divide by a fraction invert & multiply"; introduced 0 & −ve N^os (as
debts) & rules to calculate with them. Abreviations gave rise to some
alg. symbolism eg ka ——— ≡ $\sqrt{}$
This led them to reckon with irrationals "like they were integers"
Eg $\sqrt{a} + \sqrt{b} = \sqrt{(a+b) + 2\sqrt{ab}}$ as would be the case if a & b were perfect
squares.