

M	T	W	T	F	S	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28		

For both Pythagoreans/Plato, Number has an independent, eternal existence. The "2" exists whether or not we measure sheep or rods.

Aristotle: More pragmatic — mathematics studies abstractions of quantity, which are exact in thought, even if the world is messy. He knew measurement is approximate, but the science of quantity is exact by definition.

2. Islamic & Medieval World

Mathematicians like al-Khwarizmi, Omar Khayyam, and al-Tusi wrestled with algebra and irrationals. They kept the ideal vs practical distinction alive:

Algebraic rules are exact.
Measurement is approximate, but approximations serve real needs.