

Mathematics learned from how numbers change

Arithmetic, division, rotations, linear equations and quadratics learned from sequences of changing numbers, 30 August to 2 September 2026.

0 wrong across about 3,600 held-out problems; where it could not compute exactly, it declined

RESULTS

HELD-OUT PROBLEMS	RIGHT	CONTROL	
Addition	200 of 200	1 of 200 with no memory of the carry	
Addition, subtraction and multiplication	600 of 600		
Division	250 of 250		
Linear equations	200 of 200	0 of 200	
Quadratics	200 of 200		
Checking answers	1,200 of 1,200		

Bars run 0 to 100%.

HOW IT WAS MEASURED

Learning	Sequences of numbers changing, digit by digit; no calculator or formula written in
Testing	Held-out problem sets, never seen in learning

CONDITIONS

Stored size of four faculties	3,407 bytes
First learning	104 s
Declined, not guessed	49 of 200 in one multiplication set

LIMITS OF THIS RESULT

Complex numbers, eigenvalues, calculus and primality are defined over the learned faculties and tested in small sets, not thousands.

WHERE IT IS RECORDED

simplex/validate/math_induction/FINDINGS.md. The data behind this sheet is published beside it at senuaai.com/evidence/datasheets/.