

CALCUDOKU

40 Handcrafted Puzzles from Beginner to Expert · Solutions Included

Alternative Names: KenKen · Mathdoku · Kendoku · Square Wisdom (賢くなるパズル)

How to Play & Rules

- Fill every row and column with the integers from 1 up to N (the grid dimension) exactly once.
- The numbers in each heavily outlined 'cage' must combine using the cage's specified arithmetic operator (+, −, ×, ÷) to produce the target number.
- For two-cell cages with subtraction (−) or division (÷), the larger number is divided by or subtracted from the smaller (order does not matter).
- A one-cell cage holds its given target number directly without any operation.
- Digits may repeat within a cage as long as they are in different rows and different columns.

Every puzzle has exactly one valid solution, deducible purely through logical reasoning.

Difficulty Levels (40 Puzzles)

Stage	Grid Sizes	Puzzles
Intro	4×4	3
Easy	4×4 to 5×5	12
Medium	5×5 to 6×6	12
Hard	6×6 to 7×7	12
Expert	7×7 to 8×8	9

³ 3	⁴ 4	² 2	¹ 1
^{4÷} 4	³ 3	^{3÷} 1	² 2
¹ 1	² 2	³ 3	⁴ 4
³⁺ 2	¹ 1	⁴ 4	³ 3

Solved Level Example

Play 100+ Levels Online with Instant Validation

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<https://aztest.org/puzzles/calculdoku/>

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CALCUDOKU — WHAT IS ALLOWED & WHAT IS NOT ALLOWED

Visual guide illustrating correct moves versus rule violations

The Latin Square Property

Every row and every column must contain each number from 1 to N exactly once. No number may repeat in any row or column.

3+	1	2	6×	3
1-	3	1	4+	2
	2	3	1	1

✓ ALLOWED

Every row and column contains digits 1 to 3 exactly once, with no duplicates.

3+	2	2	6×	3
1-	3	1	4+	2
	2	3	1	1

✗ NOT ALLOWED

Row duplicate: the top row contains two 2s. A number cannot appear more than once in the same row.

3+	1	1	6×	3
1-	3	1	4+	2
	2	3	1	1

✗ NOT ALLOWED

Column duplicate: the middle column contains two 1s. A number cannot appear more than once in the same column.

Subtraction (−)

A subtraction cage always has two cells. Subtract the smaller number from the larger to match the target clue. Numbers can appear in either order.

2-	3	1	2
1-	1	2	3
	2	3	1

✓ ALLOWED

Larger minus smaller: $3 - 1 = 2$ (target 2-) and $2 - 1 = 1$ (target 1-). The larger number may be in either cell.

2-	2	1	3
1-	3	2	1
	1	3	2

✗ NOT ALLOWED

Wrong difference: $2 - 1 = 1$, but the cage target is 2-.

2-	3	1	2
1-	2	3	1
	1	2	3

✗ NOT ALLOWED

Wrong difference: $3 - 1 = 2$, but the cage target is 1-.

Division (÷)

A division cage always has two cells. Divide the larger number by the smaller to reach the target integer. The quotient must be exact with no remainder.

2÷	4	2	3÷	1	3
2÷	2	4	3÷	3	1
3÷	1	3	2÷	4	2
	3	1	2	4	

✓ ALLOWED

Larger divided by smaller: $4 \div 2 = 2$ (target 2÷) and $3 \div 1 = 3$ (target 3÷). Works in either cell order.

2÷	3	2	3÷	1	4
2÷	2	4	3÷	3	1
3÷	1	3	2÷	4	2
	4	1	2	3	

✗ NOT ALLOWED

Remainder not allowed: $3 \div 2 = 1.5$, which is not an integer. Division must divide evenly without remainder.

2÷	4	1	3÷	2	3
2÷	2	4	3÷	3	1
3÷	1	3	2÷	4	2
	3	2	1	4	

✗ NOT ALLOWED

Wrong quotient: $4 \div 1 = 4$, but the cage target is 2÷.

CALCUDOKU — WHAT IS ALLOWED & WHAT IS NOT ALLOWED

Visual guide illustrating correct moves versus rule violations

Addition (+)

All numbers inside the cage must add up to the target clue.

3+	1	2	6+	3
5+	2	3	1	
	3	1	2	

✓ ALLOWED

Sum equals target: $1 + 2 = 3$ (target 3+), $2 + 3 = 5$ (target 5+), and $3 + 1 + 2 = 6$ (target 6+).

3+	3	2	6+	1
5+	2	1	3	
	1	3	2	

✗ NOT ALLOWED

Wrong sum: $3 + 2 = 5$, but the cage target is 3+.

4+	2	2	6+	3
5+	3	1	2	
	1	3	1	

✗ NOT ALLOWED

Duplicate in row: even though $2 + 2 = 4$, repeating 2 in the same row violates the Latin square rule.

Multiplication (×)

All numbers inside the cage must multiply together to produce the target clue.

6×	2	3	2×	1
3×	3	1	2	
	1	2	3	

✓ ALLOWED

Product equals target: $2 \times 3 = 6$ (target 6×) and $3 \times 1 = 3$ (target 3×).

6×	1	2	2×	3
3×	2	3	1	
	3	1	2	

✗ NOT ALLOWED

Wrong product: $1 \times 2 = 2$, but the cage target is 6×.

6×	3	1	2×	2
3×	2	3	1	
	2	1	3	

✗ NOT ALLOWED

Wrong product: $2 \times 2 = 4$, but the cage target is 3×.

Puzzle #1

EASY

4 × 4

3	4	2	1
4÷	3	3÷	2
	2		4
3+		4	3

Play online: [calcudoku/#5](#)

AZTest · [aztest.org](#)

Puzzle #2

EASY

4 × 4

4	5+		1
2	1	4	3
2−	3	8×	2÷

Play online: [calcudoku/#6](#)

AZTest · [aztest.org](#)

Puzzle #3

EASY

4 × 4

1	24×		1−
		2	
2	36×	8×	1

Play online: [calcudoku/#8](#)

AZTest · [aztest.org](#)

Puzzle #4

EASY

4 × 4

36×			2
2	4		1
3×		6+	
	2	4	3

Play online: [calcudoku/#9](#)

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Puzzle #5

EASY

4 × 4

2×		12+	4
13+	1		
		3+	
3			1

Play online: [calcudoku/#10](#)

AZTest · [aztest.org](#)

Puzzle #6

EASY

4 × 4

48×		8+	
1			
2−	3×		2
	3	4	1

Play online: [calcudoku/#12](#)

AZTest · [aztest.org](#)

Puzzle #7

EASY

4 × 4

4+	7+		3
	9+		7+
2−		4	

Play online: [calcudoku/#13](#)

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Puzzle #8

EASY

4 × 4

3÷		2	4
4	12×		2
1−			
2	4	3÷	

Play online: [calcudoku/#15](#)

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Puzzle #9

EASY

4 × 4

36×			2
2×		10+	7+
2−			

Play online: [calcudoku/#16](#)

AZTest · [aztest.org](#)

Puzzle #10

EASY

4 × 4

1−		2÷	
3−		10+	
8+	3		
			4

Play online: [calcudoku/#17](#)

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Puzzle #11

EASY

4 × 4

24×		2÷	
	1	1−	4
12×			8+

Play online: [calcudoku/#19](#)

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Puzzle #12

EASY

4 × 4

6+			2−
48×	8×		
			2−
	1−		

Play online: [calcudoku/#20](#)

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Puzzle #13

MEDIUM

5 × 5

4−		1−	4	3
1	2		20×	
4	5	1	6+	
24×	3	40×		5
				1

Play online: [calcudoku/#21](#)

AZTest · [aztest.org](#)

Puzzle #14

MEDIUM

5 × 5

2	1−	1	14+	3
3−		5		1
	3−			2
2−		3÷		4
	40×			

Play online: [calcudoku/#22](#)

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Puzzle #15

MEDIUM

5 × 5

5	11+	6×		
1			12×	
9+		4	8+	5
8×				3
		5	3−	

Play online: [calcudoku/#24](#)

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Puzzle #16

MEDIUM

5 × 5

1−	13+	3−	1	5
			10+	
4		36×		6×
1			2	
3−				4

Play online: [calcudoku/#25](#)

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Puzzle #17

MEDIUM

5 × 5

15×	2÷		10+	13+
	2			
	1	60×		
2			5	
4	5	3	1	2

Play online: [calcudoku/#26](#)

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Puzzle #18

MEDIUM

5 × 5

6×	5	11+		
		5	45×	
4	6×			
5	1−		2	
1		4	3−	

Play online: [calcudoku/#28](#)

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Puzzle #19

MEDIUM

5 × 5

1	3	12+	1−	
5			3÷	
60×		11+	3−	
				1
2	1		3	4

Play online: [calcudoku/#29](#)

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Puzzle #20

MEDIUM

5 × 5

5	6+		32×	
10+			6+	
	8+			1
6+			3	10+
4÷		5		

Play online: [calcudoku/#31](#)

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Puzzle #21

MEDIUM

5 × 5

40×	8+		1−	8+
		7+		
			5	
5+	3÷	4	10+	3−

Play online: [calcudoku/#32](#)

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Puzzle #22

MEDIUM

5 × 5

1	10+			4
2	12×		5	5÷
10+		20×	2	
	10×			1−
		3−		

Play online: [calcudoku/#33](#)

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Puzzle #23

MEDIUM

5 × 5

40×		9+		24×
3			2	
20×		4	60×	
	8+			
				5

Play online: [calcudoku/#35](#)

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Puzzle #24

MEDIUM

5 × 5

12+		8+	6+	
				15+
24×	1			
	4+		1−	
	10+			1

Play online: [calcudoku/#36](#)

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Puzzle #25

HARD

6 × 6

4÷	8+		4	5	3
	8+	36×		1	14+
			3	2÷	
12+			6		
5	144×		10+		
		4−			4

Play online: [calcudoku/#37](#)

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Puzzle #26

HARD

6 × 6

2÷	54×		120×		1
	2			5	9+
6	15+	4	1		
			12×	3	1−
14+				6	
		5	8×		

Play online: [calcudoku/#38](#)

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Puzzle #27

HARD

6 × 6

12+		60×			1
	5	10×		3	24×
1−	2÷		6	2÷	
		5×			3
18+				9+	7+
3	1	4			

Play online: [calcudoku/#39](#)

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Puzzle #28

HARD

6 × 6

5×		6	24×		150×
3	12+	1	11+		
24×	10×		90×	1	4
	18×				
		5	12+		

Play online: [calcudoku/#40](#)

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Puzzle #29

HARD

6 × 6

25×		6	3	2	18+
	36×	1	16×	10+	
4	12×		120×		
12×				10+	2
		2−			

Play online: [calcudoku/#41](#)

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Puzzle #30

HARD

6 × 6

11+		8+		75×	4
			6÷		
1−		15+		2−	5−
12×	6				
			12+		
2−		2−			2

Play online: [calcudoku/#42](#)

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Puzzle #31

HARD

6 × 6

6	1−		3	1−	
8×	3−	3−		4	6
		2−	8+		
			48×	5	30×
5+		6		6×	
5	4÷				

Play online: [calcudoku/#43](#)

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Puzzle #32

HARD

6 × 6

1	144×		1−		24×
5			4		
3÷		5	3		1
2−	6+			60×	6
	240×		1		
2−				10×	

Play online: [calcudoku/#44](#)

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Puzzle #33 **HARD**

6 × 6

1	6	3	15+		5
5	8×				
30×	3−		1−	1−	1
		9+			48×
6					
14+				5	

Play online: [calculudoku/#45](https://aztest.org/puzzles/calculudoku/#45)AZTest · aztest.org**Puzzle #34** **HARD**

6 × 6

6	8×	8+			12+
3		1	6		
2	72×			9+	
20×	20+		4+		144×
2−			2		4

Play online: [calculudoku/#46](https://aztest.org/puzzles/calculudoku/#46)AZTest · aztest.org**Puzzle #35** **HARD**

6 × 6

11+			2	6	4
3−			6	3	9+
240×	10+		1−		
		4	5	2×	
		9+			3÷
5	1−		5+		

Play online: [calculudoku/#47](https://aztest.org/puzzles/calculudoku/#47)AZTest · aztest.org**Puzzle #36** **HARD**

6 × 6

24×	3	12×		8+	4÷
	3−				
5	5−	3	6+		9+
30×		10+	120×		
	4			7+	10×

Play online: [calculudoku/#48](https://aztest.org/puzzles/calculudoku/#48)AZTest · aztest.org

Puzzle #37 STARTER

3 × 3

2	1	3
9×	2	2÷

Play online: [calcudoku/#1](#)

AZTest · [aztest.org](#)

Puzzle #38 STARTER

3 × 3

1-		1
2	3×	3
		2

Play online: [calcudoku/#2](#)

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Puzzle #39 STARTER

3 × 3

6×		
6×		2
	3	1

Play online: [calcudoku/#3](#)

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Puzzle #40 STARTER

3 × 3

18×		2×
	6×	

Play online: [calcudoku/#4](#)

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CALCUDOKU SOLUTIONS

Complete solved grids for Puzzles #1 to #12

Puzzle #1

Easy (4×4)

3	4	2	1
3	4	2	1
4÷	3	3÷	2
4	3	1	2
1	2	3	4
3+	2	1	4
2	1	4	3
3	4	2	1

Puzzle #2

Easy (4×4)

4	5+		1
4	2	3	1
2	1	4	3
2-	3	8×	2÷
1	3	2	4
3	4	1	2
4	2	3	1
2	1	4	3

Puzzle #3

Easy (4×4)

1	24×		1-
1	2	3	4
4	1	2	3
2	36×	8×	1
2	3	4	1
3	4	1	2
1	2	3	4
4	3	2	1

Puzzle #4

Easy (4×4)

36×			2
4	3	1	2
2	4	3	1
3×	1	6+	4
1	2	4	3
4	3	2	1
1	2	4	3
4	3	2	1

Puzzle #5

Easy (4×4)

2×		12+	4
1	2	3	4
13+	1	4	3
2	1	4	3
4	3	1	2
3	4	2	1
1	2	3	4
4	3	2	1

Puzzle #6

Easy (4×4)

48×		8+	
3	2	1	4
1	4	2	3
2-	3×	3	2
4	1	3	2
2	3	4	1
1	2	3	4
4	3	2	1

Puzzle #7

Easy (4×4)

4+	7+		3
1	4	2	3
3	2	1	4
2-	3	4	1
4	1	3	2
1	2	3	4
4	3	2	1
1	2	3	4

Puzzle #8

Easy (4×4)

3÷		2	4
1	3	2	4
4	1	3	2
1-	2	4	1
2	4	3÷	3
2	4	1	3
1	2	3	4
4	3	2	1

Puzzle #9

Easy (4×4)

36×			2
3	4	1	2
2×	3	10+	7+
1	3	2	4
2	1	4	3
2-	4	2	3
4	2	3	1
1	2	3	4

Puzzle #10

Easy (4×4)

1-		2÷	
3	4	1	2
3-		10+	
4	1	2	3
8+	3		
2	3	4	1
1	2	3	4
4	3	2	1

Puzzle #11

Easy (4×4)

24×		2÷	
3	4	2	1
2	1	3	4
12×			8+
1	3	4	2
4	2	1	3
1	2	3	4
4	3	2	1

Puzzle #12

Easy (4×4)

6+			2-
2	3	1	4
48×	8×		
3	1	4	2
1	4	2	3
2-			
4	2	3	1
1	2	3	4

CALCUDOKU SOLUTIONS

Complete solved grids for Puzzles #13 to #24

Puzzle #13

Medium (5×5)

4-	5	1	2	4	3	
1	1	2	3	20×	5	4
4	4	5	1	6+	3	2
24×	2	3	4	1	5	
	3	4	5	2	1	

Puzzle #14

Medium (5×5)

2	1-	1	14+	3		
2	4	1	5	3		
3-	4	3	5	2	1	
1	5	4	3	2		
2-	5	2	3+	3	1	4
3	40x	1	2	4	5	

Puzzle #15

Medium (5×5)

5	11+	6×	3	1	2
1	5	2	12×	3	4
9+	3	1	4	2	5
8×	4	2	1	5	3
2	3	5	4	1	

Puzzle #16

Medium (5×5)

1-	3	4	2	1	5
2	3	5	10+	4	1
4	4	1	36×	5	2
1	5	4	2	2	3
3-	5	2	1	3	4

Puzzle #17

Medium (5×5)

15x	2+			10+	13+
1	4	2		3	5
5	2	1	4	3	
3	1	5	2	4	
2	3		4	5	1
4	5	3	1	2	

Puzzle #18

Medium (5×5)

6×	5	11+		
3	5	2	4	1
2	1	5	45×	
4	6×			4
4	2	3	1	5
5	1-		2	
5	4	1	2	3
1		4	3-	
1	3	4	5	2

Puzzle #19

Medium (5×5)

1	3	12+	1-			
1	3	2	4	5		
5	2	4	3÷	1	3	
60×	3	4	11+	3-	5	2
4	5	3	2	1	1	
2	1	5	3	4	4	

Puzzle #20

Medium (5×5)

5	6+			32×	
5	1	3	4	2	
10+	3	5	2	1	4
2	8+	3	4	5	1
6+	4	2	1	3	10+
4÷	1	4	5	2	3

Puzzle #21

Medium (5×5)

40×	8+		1-	8+
4	5	3	2	1
5	2	1	3	4
1	4	2	5	3
5+	3÷	4	10+	3-
2	3	4	1	5
3	1	5	4	2

Puzzle #22

Medium (5×5)

1	10+			4		
1	5	2	3	4		
2	12×	4	3	5	5÷	1
10+	4	3	20×	2	5	
3	10×	1	5	4	1-	2
5	2	3-	4	1	3	

Puzzle #23

Medium (5×5)

40×	9+	24×		
2	5	3	1	4
3	4	5	2	1
20×	4	60×		
5	1	4	3	2
4	8+	5	3	
1	3	2	4	5

Puzzle #24

Medium (5×5)

12+	8+		6+		
1	4	5	2	3	
5	2	3	1	15+	4
24×	1				
3	1	4	5	2	
	4+		1-		
2	3	1	4	5	
	10+			1	
4	5	2	3	1	

CALCUDOKU SOLUTIONS

Complete solved grids for Puzzles #25 to #36

Puzzle #25

Hard (6×6)

4÷	8÷		4	5	3
1	6	2	4	5	3
4	5	3	2	1	6
2	1	6	3	2÷	4
12÷	3	4	5	6	2
5	3	4	1	6	2
6	2	1	5	3	4

Puzzle #26

Hard (6×6)

2÷	54×		120×		1
2	3	6	5	4	1
1	2	3	6	5	4
6	5	4	1	2	3
5	4	1	2	3	6
14÷	4	1	2	3	6
3	6	5	4	1	2

Puzzle #27

Hard (6×6)

12÷	2	60×		1	
6	2	3	4	5	1
4	5	2	1	3	6
1÷	2÷	5	6	2÷	4
2	6	1	5	4	3
18÷	5	4	6	3	9÷
3	1	4	2	6	5

Puzzle #28

Hard (6×6)

5×		6	24×		150×
5	1	6	4	3	2
3	4	1	6	2	5
2	6	4	1	5	3
24×	10×	90×	1	4	
4	2	3	5	6	1
1	3	5	2	4	6

Puzzle #29

Hard (6×6)

25×		6	3	2	18÷
1	5	6	3	2	4
5	6	1	2	4	3
3	2	4	1	5	6
4	12×	120×	6	1	5
6	1	5	4	3	2
2	4	3	5	6	1

Puzzle #30

Hard (6×6)

11÷		8÷		75×	4
6	2	1	3	5	4
2	1	4	6	3	5
1÷	4	5	15÷	2÷	5÷
3	6	2	5	4	1
1	4	5	2	6	3
5	3	6	4	1	2

Puzzle #31

Hard (6×6)

6	1÷		3	1÷	
6	5	4	3	2	1
8×	3÷	3÷		4	6
2	6	5	1	3	4
4	1	3	6	5	2
3	2	6	4	1	5
5	4	1	2	6	3

Puzzle #32

Hard (6×6)

1	144×		1÷		24×
1	4	3	5	6	2
5	2	6	4	1	3
3÷	2	6	5	3	4
2÷	6÷	3	1	2	5
6	5	2	1	3	4
3	1	4	6	2	5

Puzzle #33

Hard (6×6)

1	6	3	15÷		5
1	6	3	4	2	5
5	8×	1	2	6	3
30×	3÷	2	5	6	4
2	1	4	5	3	6
6	5	2	3	1	4
4	3	6	1	5	2

Puzzle #34

Hard (6×6)

6	8×	8÷			12÷
6	4	2	5	1	3
3	2	1	6	4	5
2	72×	6	3	4	5
4	5	6	1	3	2
5	1	4	3	2	6
1	3	5	2	6	4

Puzzle #35

Hard (6×6)

11÷		2	6	4	
3	1	5	2	6	4
3÷	1	4	2	6	3
240×	10÷	1÷	4	5	3
6	3	4	5	2	1
4	5	6	3	1	2
5	2	3	1	4	6

Puzzle #36

Hard (6×6)

24×	3	12×		8÷	4÷
4	3	6	2	5	1
6	2	5	1	3	4
5	1	3	6	4	2
2	6	1	5	4	3
3	4	2	6	1	5
1	5	4	3	6	2

CALCUDOKU SOLUTIONS

Complete solved grids for Puzzles #37 to #40

Puzzle #37

Starter (3×3)

² 2	¹ 1	³ 3
^{9×} 3	² 2	^{2÷} 1
1	3	2

Puzzle #38

Starter (3×3)

¹⁻ 3	¹ 2	¹ 1
² 2	^{3×} 1	³ 3
1	3	² 2

Puzzle #39

Starter (3×3)

^{6×} 1	² 2	³ 3
^{6×} 3	¹ 1	² 2
2	³ 3	¹ 1

Puzzle #40

Starter (3×3)

^{18×} 2	³ 3	^{2×} 1
3	¹ 1	2
1	^{6×} 2	3

Congratulations on completing the puzzles!

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