

FUTOSHIKI

50 Handcrafted Puzzles from Beginner to Expert · Solutions Included

Alternative Names: Hutoshiki (不等式) · Unequal · Greater Than / Less Than

How to Play & Rules

- Fill the grid so every row and column holds each number from 1 up to the grid dimension exactly once.
- Inequality signs (<, >, ^, v) between adjacent cells must be respected: the narrow end always points to the smaller number.
- Initial given numbers and inequality signs cannot be altered.
- Cells without signs between them may hold numbers in any order as long as Latin square rules are satisfied.
- Every puzzle has exactly one valid solution deducible through order theory without guessing.

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

Difficulty Levels (50 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	11

1	3	4	2
^	^	v	
3	4	2	1
	v		
2	>	1	<
4	2	1	3

Solved Level Example

Play 100+ Levels Online with Instant Validation

Enjoy interactive play with step-by-step hints, conflict checkers, and unlimited undo on AZTest.

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

Discover 25+ free logic games on AZTest: Slitherlink, Nurikabe, Calcudoku, Masyu, Galaxies, Hitori, Tents, and more.

FUTOSHIKI — WHAT IS ALLOWED & WHAT IS NOT ALLOWED

Visual guide illustrating correct moves versus rule violations

Each Number Once

Every row and every column holds each number from 1 up to the grid's size exactly once.

1	<	2	3	4
3	4	1	<	2
4	3	2	1	
2	1	4	3	

✓ **ALLOWED**

Every row and column holds 1, 2, 3 and 4 once, and every sign holds.

1	<	2	3	3
3	4	1	<	2
4	3	2	1	
2	1	4	3	

✗ **NOT ALLOWED**

The top row has two 3s and no 4.

1	<	2	3	4
3	4	1	<	2
4	3	2	1	
1	1	4	3	

✗ **NOT ALLOWED**

The first column has two 1s.

Signs Point at the Smaller Number

The narrow end of a sign points at the smaller of its two numbers: 1 < 2 across, and down a column $\wedge$ has the smaller number above, $\vee$ below.

1	<	2	3	4
3	4	1	<	2
4	3	2	1	
2	1	4	3	

✓ **ALLOWED**

1 < 2 in the top row; in the columns, 3 above 1 ($\vee$) and 2 above 4 ($\wedge$).

1	>	2	3	4
3	4	1	<	2
4	3	2	1	
2	1	4	3	

✗ **NOT ALLOWED**

The sign says the left cell is the larger, but 1 is smaller than 2.

1	<	2	3	4
3	4	1	<	2
4	3	2	1	
2	1	4	3	

✗ **NOT ALLOWED**

$\vee$ says the lower cell is the smaller, but 4 is larger than 2.

Puzzle #1

INTRO

4 × 4

		4	
^	^	v	
		2	1
2	>		<
	2	1	

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

AZTest · [aztest.org](#)

Puzzle #2

INTRO

4 × 4

	< 3 >		
			v
		3	
1		v	3
		^	
3	>		2

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

AZTest · [aztest.org](#)

Puzzle #3

INTRO

4 × 4

		>	4
		^	
<	4	>	
>		4	
4	1		^ 2

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

AZTest · [aztest.org](#)

Puzzle #4

EASY

5 × 5

	>		<	3
		v		v
		<		
			^	
3				1
^			>	

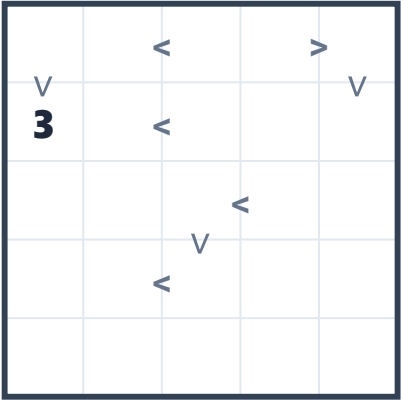
Play online: [futoshiki/#4](#)

AZTest · [aztest.org](#)

Puzzle #5

EASY

5 × 5



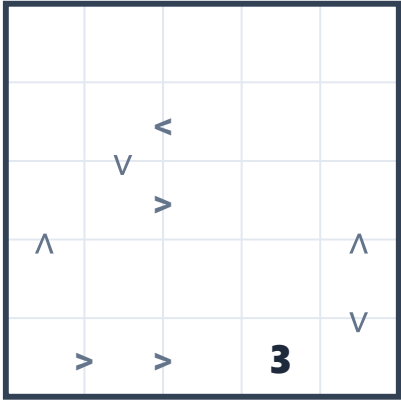
Play online: [futoshiki/#6](#)

AZTest · [aztest.org](#)

Puzzle #6

EASY

5 × 5



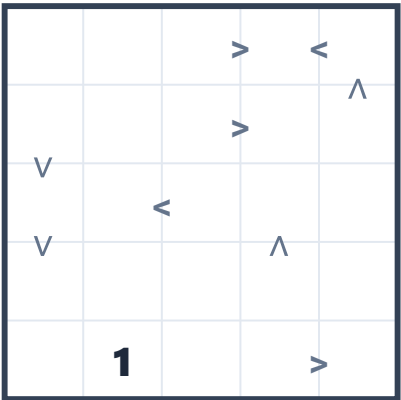
Play online: [futoshiki/#8](#)

AZTest · [aztest.org](#)

Puzzle #7

EASY

5 × 5



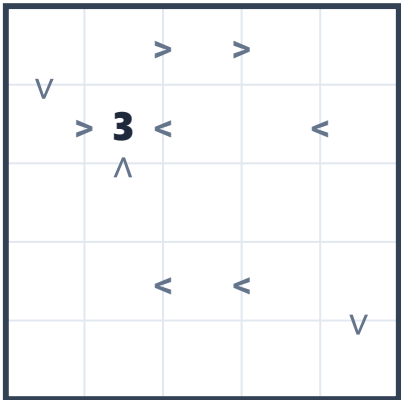
Play online: [futoshiki/#10](#)

AZTest · [aztest.org](#)

Puzzle #8

EASY

5 × 5

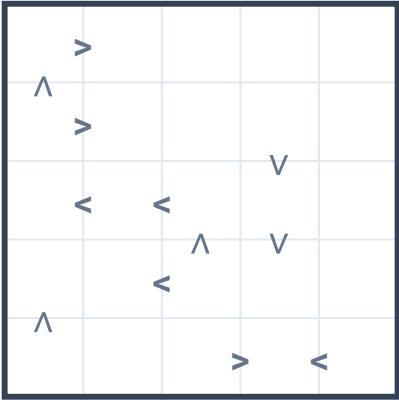


Play online: [futoshiki/#12](#)

AZTest · [aztest.org](#)

Puzzle #9 EASY

5 × 5

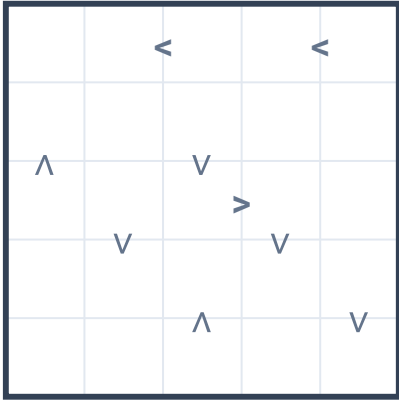


Play online: [futoshiki/#14](#)

AZTest · [aztest.org](#)

Puzzle #10 EASY

5 × 5

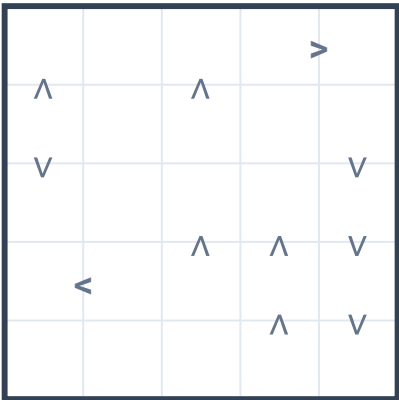


Play online: [futoshiki/#15](#)

AZTest · [aztest.org](#)

Puzzle #11 EASY

5 × 5

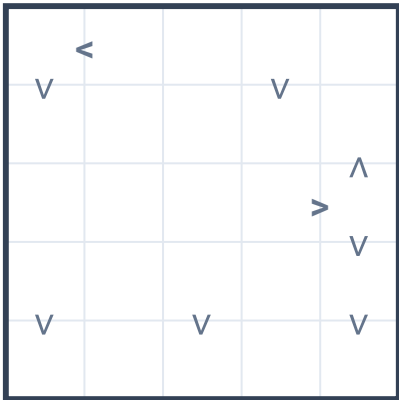


Play online: [futoshiki/#17](#)

AZTest · [aztest.org](#)

Puzzle #12 EASY

5 × 5



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

AZTest · [aztest.org](#)

Puzzle #13 EASY

5 × 5

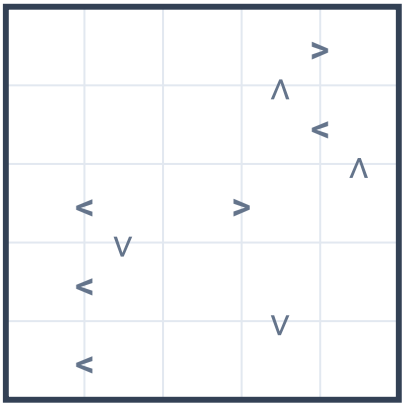


Play online: [futoshiki/#21](#)

AZTest · [aztest.org](#)

Puzzle #14 EASY

5 × 5

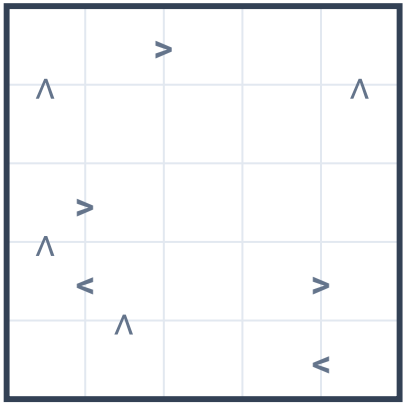


Play online: [futoshiki/#23](#)

AZTest · [aztest.org](#)

Puzzle #15 EASY

5 × 5

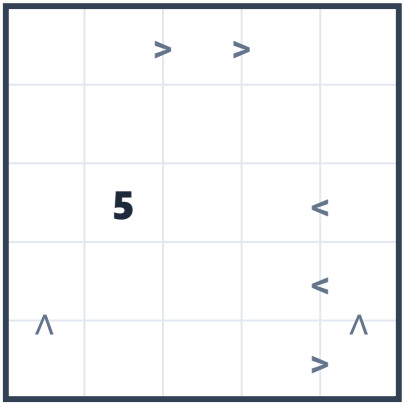


Play online: [futoshiki/#25](#)

AZTest · [aztest.org](#)

Puzzle #16 MEDIUM

5 × 5



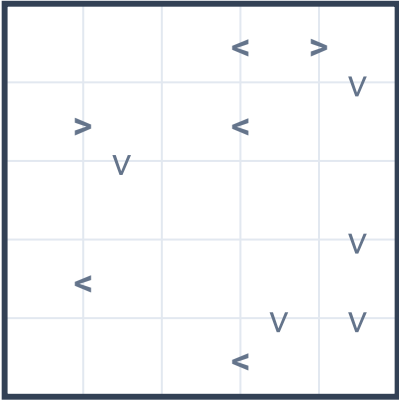
Play online: [futoshiki/#26](#)

AZTest · [aztest.org](#)

Puzzle #17

MEDIUM

5 × 5



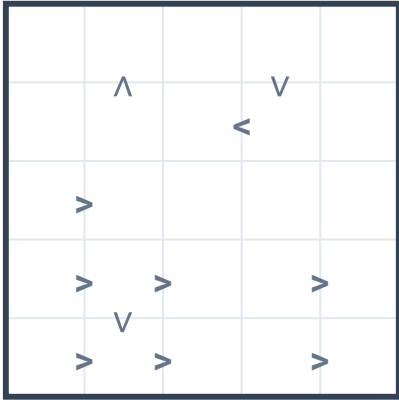
Play online: [futoshiki/#28](https://aztest.org/futoshiki/#28)

AZTest · aztest.org

Puzzle #18

MEDIUM

5 × 5



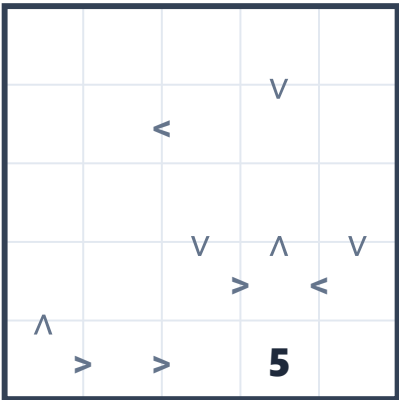
Play online: [futoshiki/#30](https://aztest.org/futoshiki/#30)

AZTest · aztest.org

Puzzle #19

MEDIUM

5 × 5



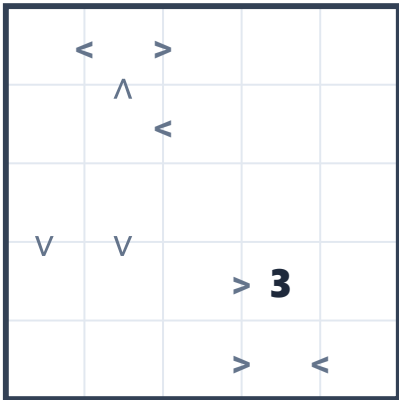
Play online: [futoshiki/#33](https://aztest.org/futoshiki/#33)

AZTest · aztest.org

Puzzle #20

MEDIUM

5 × 5



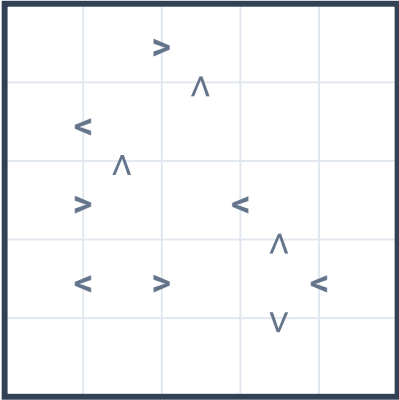
Play online: [futoshiki/#35](https://aztest.org/futoshiki/#35)

AZTest · aztest.org

Puzzle #21

MEDIUM

5 × 5



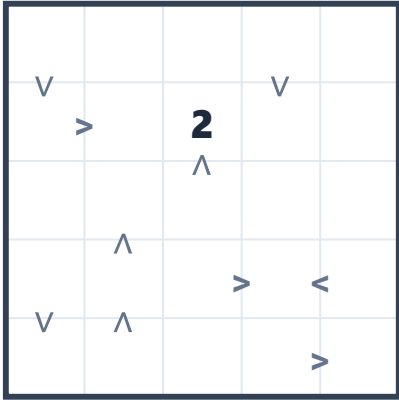
Play online: futoshiki/#37

AZTest · aztest.org

Puzzle #22

MEDIUM

5 × 5



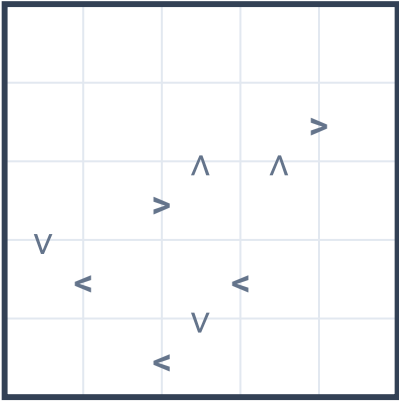
Play online: futoshiki/#39

AZTest · aztest.org

Puzzle #23

MEDIUM

5 × 5



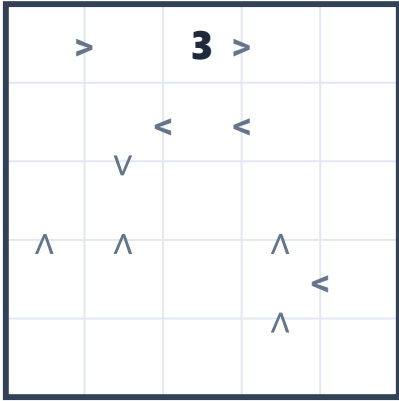
Play online: futoshiki/#41

AZTest · aztest.org

Puzzle #24

MEDIUM

5 × 5



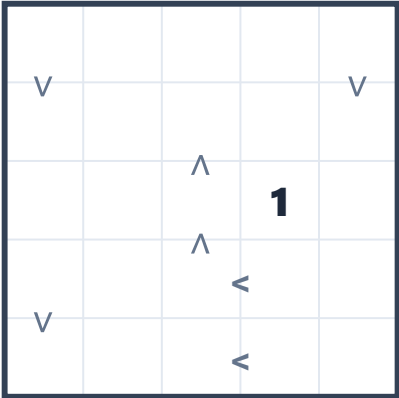
Play online: futoshiki/#43

AZTest · aztest.org

Puzzle #25

MEDIUM

5 × 5



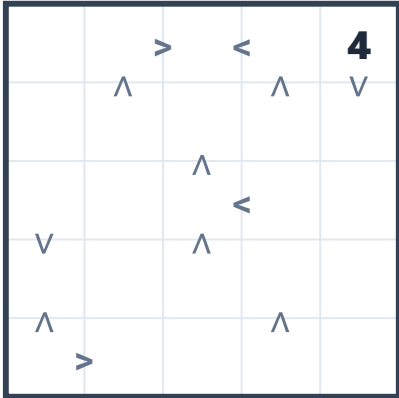
Play online: [futoshiki/#46](#)

AZTest · [aztest.org](#)

Puzzle #26

MEDIUM

5 × 5



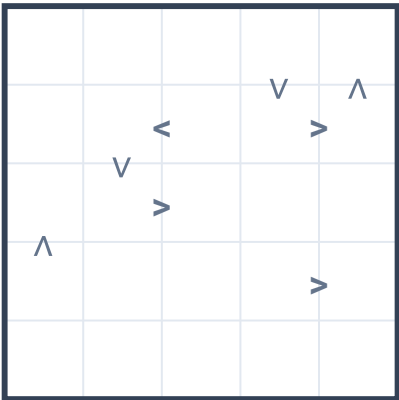
Play online: [futoshiki/#48](#)

AZTest · [aztest.org](#)

Puzzle #27

MEDIUM

5 × 5



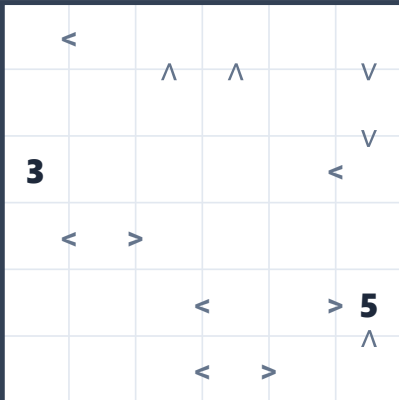
Play online: [futoshiki/#50](#)

AZTest · [aztest.org](#)

Puzzle #28

HARD

6 × 6



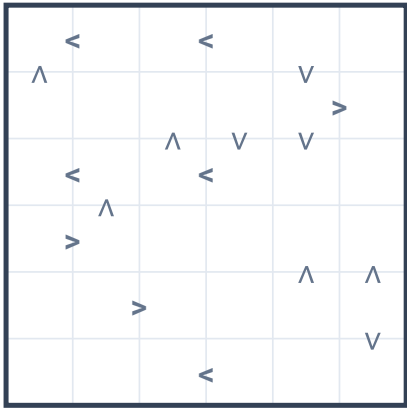
Play online: [futoshiki/#51](#)

AZTest · [aztest.org](#)

Puzzle #29

HARD

6 × 6



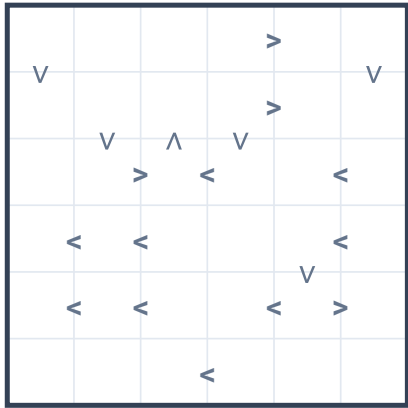
Play online: [futoshiki/#53](#)

AZTest · [aztest.org](#)

Puzzle #30

HARD

6 × 6



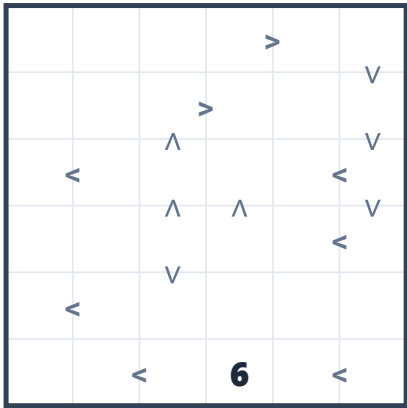
Play online: [futoshiki/#55](#)

AZTest · [aztest.org](#)

Puzzle #31

HARD

6 × 6



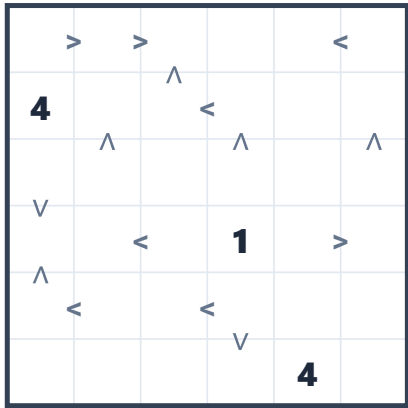
Play online: [futoshiki/#58](#)

AZTest · [aztest.org](#)

Puzzle #32

HARD

6 × 6

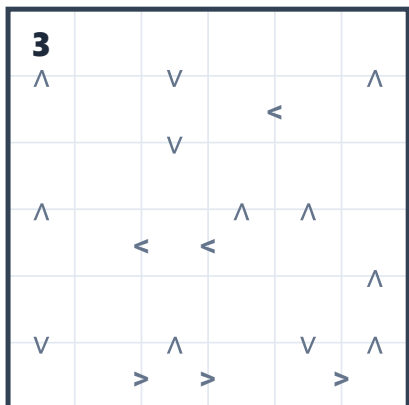


Play online: [futoshiki/#60](#)

AZTest · [aztest.org](#)

Puzzle #33 HARD

6 × 6

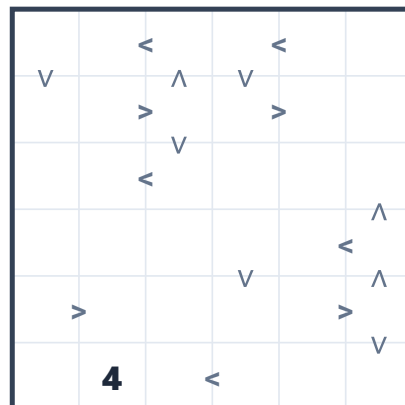


Play online: futoshiki/#62

AZTest · aztest.org

Puzzle #34 HARD

6 × 6

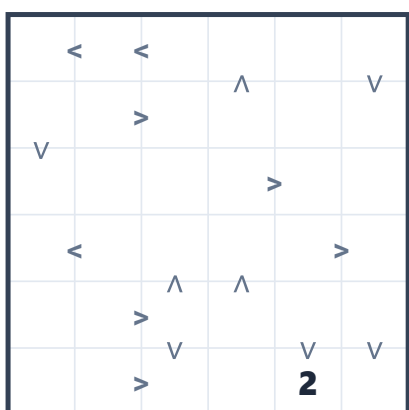


Play online: futoshiki/#64

AZTest · aztest.org

Puzzle #35 **HARD**

6 × 6

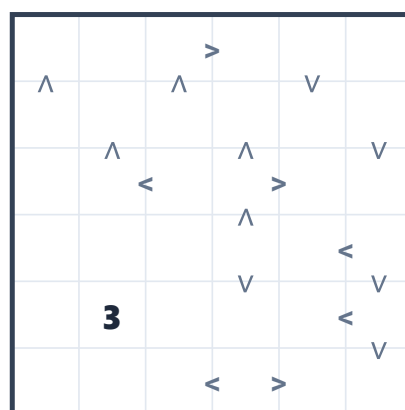


Play online: futoshiki/#66

AZTest · aztest.org

Puzzle #36 HARD

6 × 6



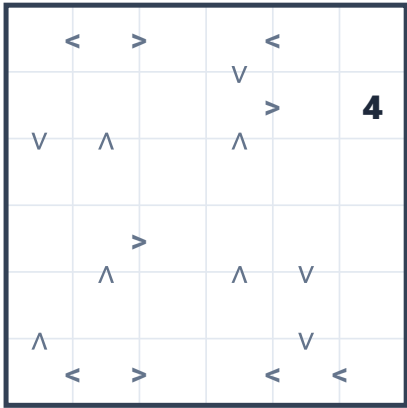
Play online: futoshiki/#68

AZTest · aztest.org

Puzzle #37

HARD

6 × 6



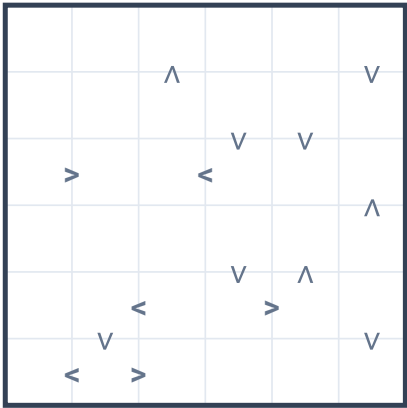
Play online: [futoshiki/#71](https://aztest.org/futoshiki/#71)

AZTest · aztest.org

Puzzle #38

HARD

6 × 6



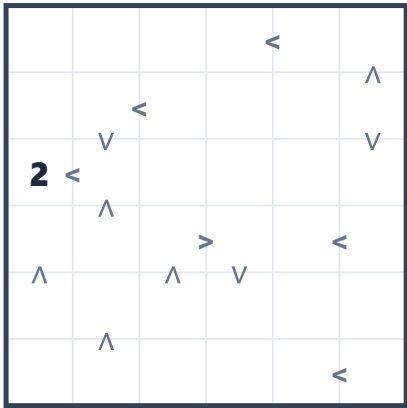
Play online: [futoshiki/#73](https://aztest.org/futoshiki/#73)

AZTest · aztest.org

Puzzle #39

HARD

6 × 6



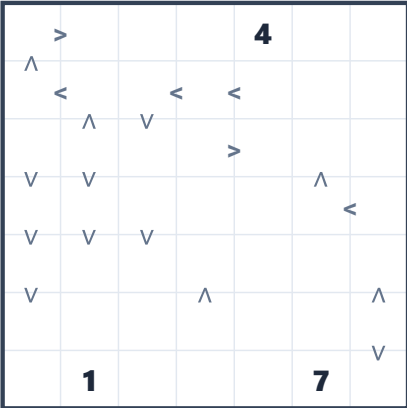
Play online: [futoshiki/#75](https://aztest.org/futoshiki/#75)

AZTest · aztest.org

Puzzle #40

EXPERT

7 × 7



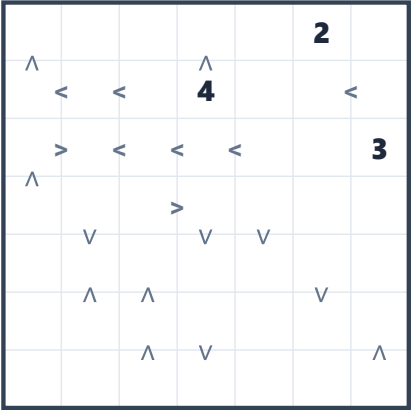
Play online: [futoshiki/#76](https://aztest.org/futoshiki/#76)

AZTest · aztest.org

Puzzle #41

EXPERT

7 × 7



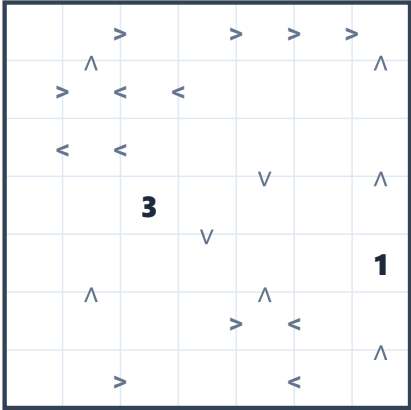
Play online: [futoshiki/#78](#)

AZTest · [aztest.org](#)

Puzzle #42

EXPERT

7 × 7



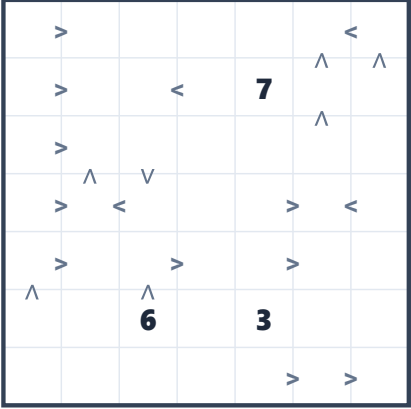
Play online: [futoshiki/#81](#)

AZTest · [aztest.org](#)

Puzzle #43

EXPERT

7 × 7



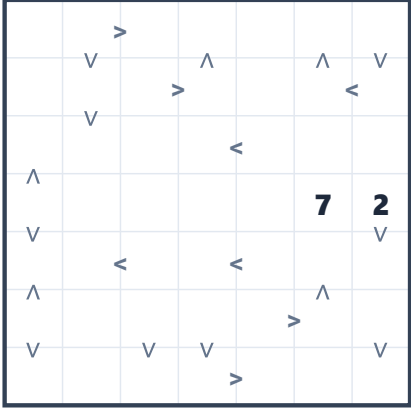
Play online: [futoshiki/#83](#)

AZTest · [aztest.org](#)

Puzzle #44

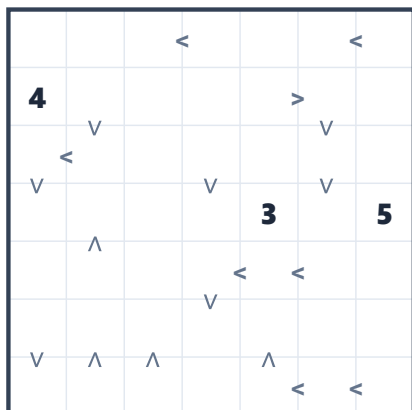
EXPERT

7 × 7



Play online: [futoshiki/#86](#)

AZTest · [aztest.org](#)

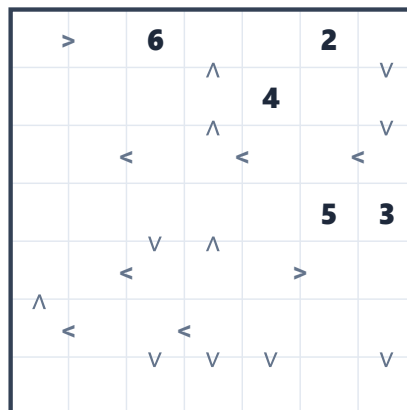
Puzzle #45 **EXPERT** 7×7 

Play online: futoshiki/#88

AZTest · aztest.org

Puzzle #46 EXPERT

7 × 7

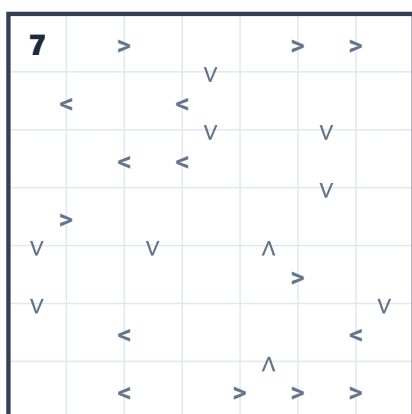


Play online: futoshiki/#90

AZTest · aztest.org

Puzzle #47 EXPERT

7 × 7

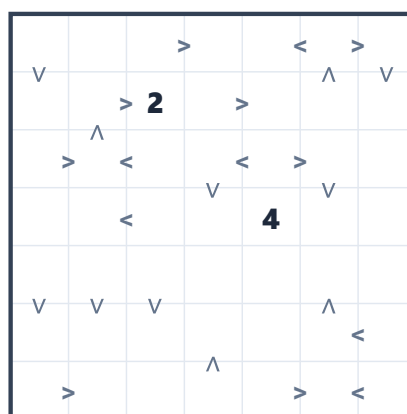


Play online: futoshiki/#93

AZTest · aztest.org

Puzzle #48 **EXPERT**

7 × 7



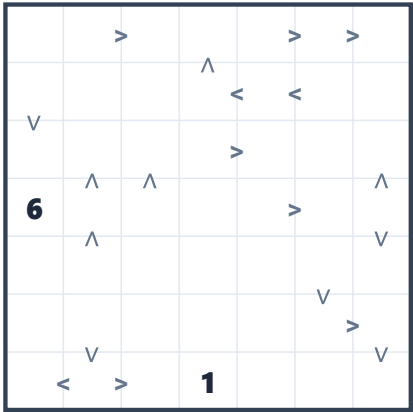
Play online: futoshiki/#95

AZTest · aztest.org

Puzzle #49

EXPERT

7 × 7



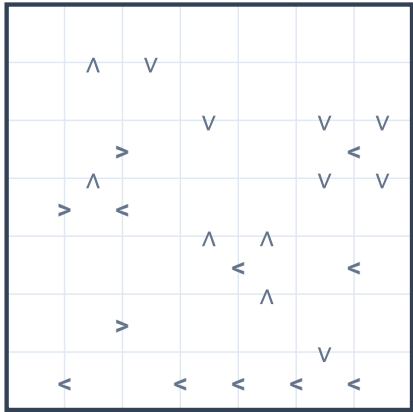
Play online: [futoshiki/#98](https://aztest.org/futoshiki/#98)

AZTest · aztest.org

Puzzle #50

EXPERT

7 × 7



Play online: [futoshiki/#100](https://aztest.org/futoshiki/#100)

AZTest · aztest.org

FUTOSHIKI SOLUTIONS

Complete solved grids for Puzzles #1 to #12

Puzzle #1Intro (4×4)

1	3	4	2
^	^	v	
3	4	2	1
	v		
2	>	1	<
4	2	1	3

Puzzle #2Intro (4×4)

2	<	3	>
4	2	3	1
1	4	2	3
3	>	1	4

Puzzle #3Intro (4×4)

2	3	>	1
1	<	4	>
3	>	2	4
4	1	3	2

Puzzle #4Easy (5×5)

2	>	1	4	<
5	4	1	3	2
1	3	<	5	2
3	5	2	4	1
4	2	3	>	1

Puzzle #5Easy (5×5)

5	1	<	2	4
3	4	<	5	2
1	3	4	<	5
4	2	<	3	1
2	5	1	3	4

Puzzle #6Easy (5×5)

2	5	4	1	3
1	3	<	5	4
3	2	>	1	5
4	1	3	2	5
5	>	4	>	2

Puzzle #7Easy (5×5)

1	5	3	>	2
4	3	2	>	1
3	2	<	5	4
2	4	1	5	3
5	1	4	3	>

Puzzle #8Easy (5×5)

5	4	>	3	>
4	>	3	<	5
2	5	1	3	4
3	1	<	2	<
1	2	4	5	3

Puzzle #9Easy (5×5)

2	>	1	3	5
5	>	3	1	4
1	<	2	<	4
3	4	<	5	2
4	5	2	>	1

Puzzle #10Easy (5×5)

5	2	<	3	1
1	3	5	4	2
2	5	4	>	3
3	4	1	2	5
4	1	2	5	3

Puzzle #11Easy (5×5)

3	2	1	5	>
4	1	3	2	5
2	5	4	1	3
1	<	4	5	3
5	3	2	4	1

Puzzle #12Easy (5×5)

2	<	3	1	4
1	4	5	3	2
3	1	2	5	>
5	2	4	1	3
4	5	3	2	1

FUTOSHIKI SOLUTIONS

Complete solved grids for Puzzles #13 to #24

Puzzle #13

Easy (5×5)

3	<	4	1	2	5
5	3	2	>	1	4
4	>	2	3	<	5
1	5	4	3	2	
2	1	5	>	4	>

Puzzle #14

Easy (5×5)

4	3	5	2	>	1
5	1	2	3	<	4
2	<	4	3	>	1
1	<	2	4	5	3
3	<	5	1	4	2

Puzzle #15

Easy (5×5)

4	3	>	1	5	2
5	2	4	1	3	
2	>	1	3	4	5
3	<	4	5	2	>
1	5	2	3	<	4

Puzzle #16

Medium (5×5)

1	4	>	3	>	2
3	2	4	5	1	
2	5	1	3	<	4
4	3	5	1	<	2
5	1	2	4	>	3

Puzzle #17

Medium (5×5)

2	1	3	<	5	>
5	>	4	1	<	2
3	2	4	1	5	
1	<	3	5	4	2
4	5	2	<	3	1

Puzzle #18

Medium (5×5)

2	1	5	4	3	
1	5	2	<	3	4
3	>	2	4	1	5
5	>	4	>	3	2
4	>	3	>	1	5

Puzzle #19

Medium (5×5)

5	1	2	4	3	
2	4	<	5	3	1
3	2	4	1	5	
1	5	3	>	2	<
4	>	3	>	1	5

Puzzle #20

Medium (5×5)

1	<	3	>	2	5
3	4	<	5	2	1
5	2	1	4	3	
2	1	4	>	3	5
4	5	3	>	1	<

Puzzle #21

Medium (5×5)

4	5	>	3	1	2
1	<	2	4	5	3
5	>	4	2	<	3
2	<	3	>	1	4
3	1	5	2	4	

Puzzle #22

Medium (5×5)

4	2	1	5	3	
3	>	1	2	4	5
1	3	5	2	4	
5	4	3	>	1	<
2	5	4	3	>	1

Puzzle #23

Medium (5×5)

2	3	5	1	4	
5	4	1	3	>	2
3	5	>	2	4	1
1	<	2	4	<	5
4	1	<	3	2	5

Puzzle #24

Medium (5×5)

5	>	4	3	>	1
2	3	<	4	<	5
3	1	5	2	4	
4	2	1	3	<	5
1	5	2	4	3	

FUTOSHIKI SOLUTIONS

Complete solved grids for Puzzles #25 to #36

Puzzle #25

Medium (5×5)

4	1	5	2	3
∇				∇
3	5	1	4	2
		∧		
5	2	3	1	4
		∧		
2	3	4	<	5
∇				
1	4	2	<	3

Puzzle #26

Medium (5×5)

5	3	>	1	<	2	4
	∧			∧	∇	
1	5	3	4	2		
		∧				
3	2	4	<	5	1	
∇						
2	4	5	1	3		
∧				∧		
4	>	1	2	3	5	

Puzzle #27

Medium (5×5)

3	2	4	5	1
			∇	∧
1	4	<	5	3
	∇			>
4	3	>	1	2
∧				
5	1	2	4	>
2	5	3	1	4

Puzzle #28

Hard (6×6)

5	<	6	2	1	3	4
		∧	∧			∇
6	1	5	2	4	3	
					∇	
3	5	6	4	1	<	2
2	<	4	>	3	6	5
4	2	1	<	3	6	>
					∧	
1	3	4	<	5	>	2

Puzzle #29

Hard (6×6)

2	<	3	1	<	4	6	5
	∧					∇	
4	1	3	6	5	>	2	
				∇			
1	<	2	4	<	5	3	6
				∧			
5	>	4	6	2	1	3	
					∧		
3	6	>	5	1	2	4	
					∇		
6	5	2	<	3	4	1	

Puzzle #30

Hard (6×6)

3	1	5	6	>	2	4
∇					∇	
2	6	1	5	>	4	3
		∇	∧		∇	
6	4	>	2	<	3	1
1	<	3	<	4	2	5
				∇		
4	<	5	<	6	1	<
5	2	3	<	4	6	1

Puzzle #31

Hard (6×6)

2	3	1	5	>	4	6
				∇		
6	1	3	>	2	5	4
		∧			∇	
4	<	6	5	1	2	<
			∧			
5	4	6	3	1	<	2
		∇				
3	<	5	2	4	6	1
1	2	<	4	6	3	<

Puzzle #32

Hard (6×6)

6	>	5	>	1	3	2	<	4
			∧					
4	1	3	<	5	6	2		
		∧		∧				
3	2	4	6	1	5			
	∇							
2	4	<	6	1	5	>	3	
	∧							
5	<	6	2	<	4	3	1	
			∇					
1	3	5	2	4	6			

Puzzle #33

Hard (6×6)

3	2	6	5	1	4
∧					∧
6	1	4	2	<	3
		∇			
1	5	3	4	2	6
		∧		∧	
2	3	<	5	<	6
5	4	1	3	6	2
		∇		∇	∧
4	6	>	2	>	1

Puzzle #34

Hard (6×6)

5	1	<	2	3	<	4	6
∇			∧	∇			
3	6	>	5	2	>	1	4
			∇				
2	3	<	4	6	5	1	
						∧	
1	5	6	4	2	<	3	
			∇			∧	
4	>	2	3	1	6	>	5
						∇	
6	4	1	<	5	3	2	

Puzzle #35

Hard (6×6)

3	<	5	<	6	2	1	4
				∧			∇
6	2	>	1	4	5	3	
		∇					
4	1	2	5	>	3	6	
2	<	3	4	1	6	>	5
			∧	∧			
1	6	>	5	3	4	2	
		∇		∇	∇		
5	4	>	3	6	2	1	

Puzzle #36

Hard (6×6)

4	5	2	>	1	6	3
∧			∧		∇	
5	1	3	2	4	6	
		∧			∇	
1	4	<	6	3	>	2
				∧		
2	6	1	5	3	<	4
			∇		∇	
6	3	5	4	1	<	2
					∇	
3	2	4	<	6	>	5

FUTOSHIKI SOLUTIONS

Complete solved grids for Puzzles #37 to #48

Puzzle #37

Hard (6×6)

3	<	4	>	2	5	<	6	1	
6	1	5	3	>	2	4			
5	2	6	4	1	3				
4	3	>	1	2	5	6			
1	5	3	6	4	2				
2	<	6	>	4	1	<	3	<	5

Puzzle #38

Hard (6×6)

5	6	2	1	3	4
4	1	5	3	6	2
6	> 3	1	< 2	4	5
3	2	4	5	1	6
1	5	< 6	4	> 2	3
2	< 4	> 3	6	5	1

Puzzle #39

Hard (6×6)

4	2	3	5 < 6	1
3	4 < 6	1	2	5
2 < 3	1	6	5	4
5	6	4 > 3	1 < 2	
6	1	5	2	4
1	5	2	4	3 < 6

Puzzle #40

Expert (7×7)

3	>	2	5	7	4	6	1		
4	<	5	2	<	3	<	6	1	7
7	6	1	5	>	3	2	4		
6	4	7	2	1	3	<	5		
5	3	6	1	7	4	2			
1	7	3	4	2	5	6			
2	1	4	6	5	7	3			

Puzzle #41

Expert (7×7)

4	7	1	3	5	2	6				
5	<	6	<	7	4	3	1	<	2	
2	>	1	<	4	<	6	<	7	5	3
7	4	5	>	2	6	3	1			
6	3	2	1	4	7	5				
1	5	3	7	2	6	4				
3	2	6	5	1	4	7				

Puzzle #42

Expert (7×7)

3	2 > 1	7 > 6 > 5 > 4
7 > 3 < 4 < 6	2	1 5
4 < 5 < 6	1 7	3 2
6 1 3	4 5	2 7
5 4 7	2 3	6 1
1 6 2	5 > 4 < 7	3
2 7 > 5	3 1 < 4	6

Puzzle #43

Expert (7×7)

7	>	6	3	4	1	2	<	5		
5	>	4	1	<	2	7	3	6		
3	>	2	7	5	4	6	1			
6	>	3	<	5	7	2	>	1	<	4
2	>	1	4	>	3	6	>	5	7	
4	5	6	1	3	7	2				
1	7	2	6	5	>	4	>	3		

Puzzle #44

Expert (7×7)

7	5 > 3	2	4	1	6
2	3	7 > 6	1	4 < 5	
1	2	4	3 < 6	5	7
4	6	5	1	3	7 2
3	4 < 6	5 < 7	2	1	
6	1	2	7	5 > 3	4
5	7	1	4 > 2	6	3

Puzzle #45

Expert (7×7)

7	1	2	<	5	4	3	<	6
4	6	1	2	7	>	5	3	
3	<	5	4	7	6	2	1	
2	4	7	6	3	1	5		
1	7	3	4	<	5	<	6	2
6	2	5	3	1	7	4		
5	3	6	1	2	<	4	<	7

Puzzle #46

Expert (7×7)

4	>	3	6	1	5	2	7
3	5	1	2	4	7	6	
6	1	<	2	3	<	7	4
2	6	7	4	1	5	3	
1	2	<	5	7	6	>	3
5	<	7	4	<	6	3	1
7	4	3	5	2	6	1	

Puzzle #47

Expert (7×7)

7	5	>	1	6	4	>	3	>	2
1	<	2	3	<	5	6	7	4	
5	1	<	2	<	4	7	6	3	
4	>	3	6	1	2	5	7		
3	7	4	2	5	>	1	6		
2	6	<	7	3	1	4	<	5	
6	4	<	5	7	>	3	>	2	1

Puzzle #48

Expert (7×7)

7	1	4	>	3	2	<	6	>	5
1	3	>	2	6	>	5	7	4	
5	>	4	<	6	2	<	7	>	3
3	5	<	7	1	4	2	6		
6	7	3	5	1	4	2			
2	6	1	4	3	5	<	7		
4	>	2	5	7	6	>	1	<	3

FUTOSHIKI SOLUTIONS

Complete solved grids for Puzzles #49 to #50

Puzzle #49

Expert (7×7)

4	7	>	6	2	5	>	3	>	1
7	2	1	3	<	4	<	5	6	
5	1	3	7	>	6	2	4		
6	3	5	4	2	>	1	7		
1	4	2	6	3	7	5			
2	6	7	5	1	4	>	3		
3	<	5	>	4	1	7	6	2	

Puzzle #50

Expert (7×7)

4	1	5	7	6	2	3
3	2	4	5	1	6	7
1	3	>	2	4	7	5
7	>	5	<	6	1	2
5	6	7	3	<	4	1
2	4	>	3	6	5	7
6	<	7	1	<	2	<

Congratulations on completing the puzzles!

Visit aztest.org/puzzles/ for 25+ free logic puzzle games, brain teasers, and cognitive exercises.