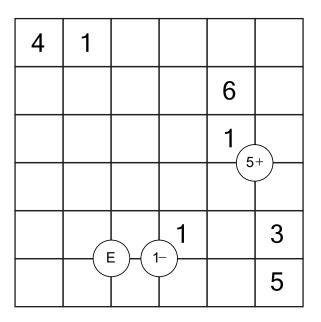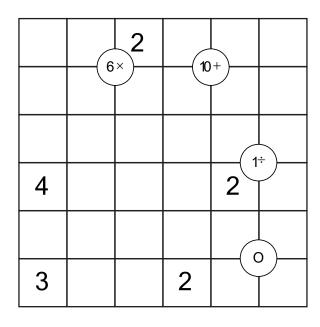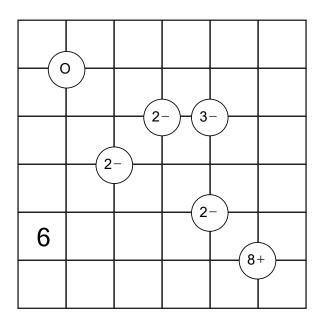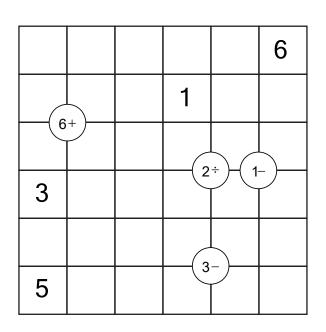# 6 by 6 Mathrix Puzzles

Place the number 1 to 6 such that each row and column contains the digits 1 to 6. Circles with conditions are placed on some intersections and are meant for the 2 pairs of diagonally adjacent cells. This can be the sum (+), difference (-), product (×), quotient (÷), only odd (O) or only even (E).

**Puzzle 1 (top left):**

| 4 | 1 |   |   |   |   |
|---|---|---|---|---|---|
|   |   |   |   | 6 |   |
|   |   |   |   | 1 |   |
|   |   |   |   | (5+) |   |
|   |   | (E) | (1−) 1 |   | 3 |
|   |   |   |   |   | 5 |

**Puzzle 2 (top right):**

|   |   |   | 2 |   |   |
|---|---|---|---|---|---|
|   |   | (6×) |   | (10+) |   |
|   |   |   |   |   |   |
| 4 |   |   |   | 2 | (1÷) |
|   |   |   |   |   | (O) |
| 3 |   |   | 2 |   |   |

**Puzzle 3 (bottom left):**

| (O) |   |   |   |   |   |
|---|---|---|---|---|---|
|   |   | (2−) | (3−) |   |   |
|   | (2−) |   |   |   |   |
|   |   |   | (2−) |   |   |
| 6 |   |   |   | (8+) |   |
|   |   |   |   |   |   |

**Puzzle 4 (bottom right):**

|   |   |   |   |   | 6 |
|---|---|---|---|---|---|
|   |   |   | 1 |   |   |
|   | (6+) |   |   |   |   |
| 3 |   |   | (2÷) | (1−) |   |
|   |   |   |   |   |   |
| 5 |   |   | (3−) |   |   |

# Answers

Place the number 1 to 6 such that each row and column contains the digits 1 to 6. Circles with conditions are placed on some intersections and are meant for the 2 pairs of diagonally adjacent cells. This can be the sum (+), difference (-), product (×), quotient (÷), only odd (O) or only even (E).

## Grid 1 (top-left)

| 4 | 1 | 3 | 5 | 2 | 6 |
|---|---|---|---|---|---|
| 3 | 4 | 5 | 2 | 6 | 1 |
| 5 | 3 | 6 | 4 | 1 | 2 |
| 2 | 5 | 1 | 6 | 3 | 4 |
| 6 | 2 | 4 | 1 | 5 | 3 |
| 1 | 6 | 2 | 3 | 4 | 5 |

Conditions: 5+, E, 1−

## Grid 2 (top-right)

| 1 | 6 | 2 | 5 | 4 | 3 |
|---|---|---|---|---|---|
| 2 | 3 | 1 | 6 | 5 | 4 |
| 5 | 1 | 4 | 3 | 6 | 2 |
| 4 | 5 | 3 | 1 | 2 | 6 |
| 6 | 2 | 5 | 4 | 3 | 1 |
| 3 | 4 | 6 | 2 | 1 | 5 |

Conditions: 6×, 10+, 1÷, O

## Grid 3 (bottom-left)

| 3 | 5 | 4 | 2 | 6 | 1 |
|---|---|---|---|---|---|
| 5 | 1 | 3 | 4 | 2 | 6 |
| 4 | 3 | 6 | 5 | 1 | 2 |
| 2 | 4 | 1 | 6 | 3 | 5 |
| 6 | 2 | 5 | 1 | 4 | 3 |
| 1 | 6 | 2 | 3 | 5 | 4 |

Conditions: O, 2−, 3−, 2−, 2−, 8+

## Grid 4 (bottom-right)

| 4 | 2 | 1 | 3 | 5 | 6 |
|---|---|---|---|---|---|
| 2 | 5 | 4 | 1 | 6 | 3 |
| 1 | 4 | 6 | 2 | 3 | 5 |
| 3 | 1 | 5 | 6 | 4 | 2 |
| 6 | 3 | 2 | 5 | 1 | 4 |
| 5 | 6 | 3 | 4 | 2 | 1 |

Conditions: 6+, 2÷, 1−, 3−