

# Magic Squares



Magic squares are thousands of years old. No-one knows where they originated from, but they were known to exist in China earlier than 1 000 BC.

Vertical rows, horizontal rows and diagonals all add up to the same amount in magic squares. This total is known as the 'magic number' or 'constant'. Write the magic number in the bubble as shown in the example.

1.

|   |   |   |
|---|---|---|
| 3 | 8 | 1 |
| 2 | 4 | 6 |
| 7 | 0 | 5 |

12

2.

|   |    |    |
|---|----|----|
| 9 |    |    |
|   | 10 | 12 |
|   |    | 11 |

3.

|    |    |  |
|----|----|--|
|    | 9  |  |
|    | 13 |  |
| 10 | 17 |  |

4.

|  |   |   |
|--|---|---|
|  | 8 | 3 |
|  | 4 |   |
|  | 0 |   |

5.

|   |   |   |
|---|---|---|
| 2 | 9 | 4 |
|   |   |   |
|   |   | 8 |

6.

|    |    |    |
|----|----|----|
| 16 |    |    |
|    | 13 | 17 |
|    |    | 10 |

7.

|    |    |    |
|----|----|----|
| 15 |    |    |
|    | 14 |    |
|    | 18 | 13 |

8.

|   |   |   |
|---|---|---|
| 3 |   | 5 |
|   | 6 |   |
|   |   | 9 |

9.

|    |    |  |
|----|----|--|
| 13 |    |  |
| 15 |    |  |
| 5  | 19 |  |

10.

|    |    |    |
|----|----|----|
|    | 18 |    |
|    |    |    |
| 16 | 2  | 12 |

11.

|    |    |    |
|----|----|----|
| 22 |    |    |
|    | 20 |    |
|    | 25 | 18 |

12.

|    |    |    |
|----|----|----|
| 8  |    |    |
|    | 11 |    |
| 12 |    | 14 |

13.

|    |  |    |
|----|--|----|
| 15 |  |    |
| 20 |  |    |
| 19 |  | 21 |

14.

|    |    |    |
|----|----|----|
|    |    | 17 |
|    |    |    |
| 19 | 20 | 15 |

15.

|    |   |  |
|----|---|--|
| 13 | 8 |  |
| 14 |   |  |
| 9  |   |  |



In ancient times many numbers were thought to have magical qualities. Similarly, magic squares were thought to possess special qualities.



# MAGIC SQUARE MADNESS



|    |   |    |
|----|---|----|
|    |   | 10 |
| 15 | 8 |    |
|    |   |    |

The magic number is 24

|   |    |   |
|---|----|---|
|   |    |   |
|   | 10 | 2 |
| 5 |    |   |

The magic number is 30

|   |   |  |
|---|---|--|
| 7 | 5 |  |
|   |   |  |
| 3 |   |  |

The magic number is 27

|   |   |    |
|---|---|----|
|   |   | 12 |
|   |   |    |
| 8 | 6 |    |

The magic number is 30

# MAGIC SQUARE MADNESS



|   |   |   |
|---|---|---|
| 6 |   | 8 |
|   | 5 |   |
|   |   | 4 |

The magic number is \_\_\_\_\_

|    |    |    |
|----|----|----|
| 14 | 3  | 10 |
|    |    |    |
|    | 15 |    |

The magic number is \_\_\_\_\_

|    |  |   |
|----|--|---|
| 14 |  | 6 |
| 4  |  |   |
| 18 |  |   |

The magic number is \_\_\_\_\_

|    |   |    |
|----|---|----|
|    |   | 15 |
|    |   |    |
| 13 | 8 | 11 |

The magic number is \_\_\_\_\_



# MAGIC SQUARE MADNESS



|    |   |    |    |
|----|---|----|----|
|    | 9 |    |    |
| 15 | 6 | 10 | 3  |
|    | 7 | 11 |    |
| 1  |   |    | 13 |

The magic number is \_\_\_\_\_

|    |    |    |    |
|----|----|----|----|
| 8  |    |    | 20 |
| 19 | 10 | 14 |    |
|    | 11 |    |    |
| 5  |    | 12 | 17 |

The magic number is \_\_\_\_\_

|    |    |    |    |
|----|----|----|----|
| 6  | 12 |    | 9  |
|    |    |    | 14 |
| 5  |    | 16 |    |
| 10 |    | 7  | 13 |

The magic number is 38

|    |  |    |    |
|----|--|----|----|
|    |  | 30 |    |
| 24 |  |    | 18 |
| 16 |  | 20 | 10 |
| 26 |  | 6  |    |

The magic number is 68



# MAGIC SQUARE MADNESS



|    |    |    |    |
|----|----|----|----|
|    |    | 9  | 20 |
| 19 |    | 14 |    |
| 18 | 11 |    |    |
|    | 16 | 12 |    |

The magic number is 50

|    |  |    |
|----|--|----|
|    |  | 24 |
| 27 |  | 23 |
|    |  | 28 |

The magic number is \_\_\_\_\_

|    |    |    |    |
|----|----|----|----|
| 7  |    | 16 | 21 |
|    |    | 11 |    |
|    | 18 | 22 | 15 |
| 18 |    |    | 12 |

The magic number is \_\_\_\_\_

|    |    |    |    |    |
|----|----|----|----|----|
|    | 2  | 25 | 18 | 11 |
| 3  | 21 |    |    | 10 |
| 22 | 20 | 13 | 6  | 4  |
| 16 |    | 7  |    | 23 |
| 15 | 8  |    | 24 |    |

The magic number is \_\_\_\_\_



# MAGIC SQUARE MADNESS



|   |   |    |    |
|---|---|----|----|
| 4 |   | 13 | 18 |
|   |   | 8  |    |
|   | 5 |    | 12 |
|   |   | 6  | 9  |

The magic number is 46

|    |    |    |    |
|----|----|----|----|
| 10 |    |    | 6  |
|    |    |    | 12 |
| 7  | 16 |    | 11 |
| 13 |    | 14 |    |

The magic number is 38

|   |    |    |    |
|---|----|----|----|
|   | 3  |    | 13 |
| 5 | 10 | 11 |    |
| 9 |    | 7  |    |
|   |    | 14 |    |

The magic number is 34

|    |    |    |    |
|----|----|----|----|
| 1  |    |    |    |
|    | 13 | 11 | 17 |
| 15 |    |    | 9  |
|    | 3  | 5  |    |

The magic number is 64



# MAGIC SQUARE MADNESS



|    |    |    |    |
|----|----|----|----|
| 1  | 27 |    |    |
| 23 | 13 | 11 | 17 |
|    | 21 |    | 9  |
|    |    |    | 31 |

The magic number is \_\_\_\_\_

|    |   |    |    |
|----|---|----|----|
| 10 | 5 | 17 | 6  |
|    |   |    | 12 |
| 7  |   | 4  | 11 |
| 13 |   |    |    |

The magic number is \_\_\_\_\_

|    |    |   |    |
|----|----|---|----|
| 16 | 3  |   |    |
|    | 10 |   | 8  |
|    |    | 7 | 12 |
| 4  | 15 |   | 1  |

The magic number is \_\_\_\_\_

|    |   |    |    |
|----|---|----|----|
| 4  |   | 13 | 18 |
|    |   | 8  |    |
|    | 5 |    | 12 |
| 15 |   | 6  | 9  |

The magic number is \_\_\_\_\_



# Magic Squares

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Fill in grids so that each column, row and diagonal add up to the given sum.

The sum is 65.

|    |    |    |    |    |
|----|----|----|----|----|
| 11 | 10 |    |    | 17 |
| 18 | 12 | 6  |    | 24 |
| 25 |    | 13 | 7  |    |
|    | 21 |    | 14 |    |
|    | 3  |    | 16 |    |

The sum is 195.

|    |    |    |    |    |
|----|----|----|----|----|
| 51 | 72 | 3  | 24 |    |
|    |    |    | 42 |    |
|    | 18 |    | 60 | 66 |
| 30 |    | 57 | 63 | 9  |
| 33 | 54 |    |    |    |

The sum is 260.

|    |    |    |    |    |
|----|----|----|----|----|
| 68 | 96 |    | 32 | 60 |
|    |    |    |    | 64 |
| 16 |    | 52 |    |    |
| 40 | 48 |    | 84 | 12 |
| 44 | 72 |    |    | 36 |

The sum is 65.

|    |    |    |    |  |
|----|----|----|----|--|
| 9  |    | 25 | 18 |  |
| 3  |    |    |    |  |
| 22 | 20 | 13 |    |  |
| 16 | 14 | 7  | 5  |  |
|    | 8  | 1  | 24 |  |