

## MATHEMATICAL MIND

## Mathematical mind



1. Solve the following problem as quickly as possible - without using a calculator!

$$
6+18+5+1 \div 2
$$

2. Lily has a daughter who is 22 years younger than her.

Lily's granddaughter is 27 years younger than Lily's daughter.
The three females have a combined age of 106 .
How old are they?
03. Determine the missing numbers in the sequence.
$3,3,5,4,4,3,5,5,4$,
04. Test your Sudoku smarts. Fill the grid below so that each column, row and $3 \times 3$ block contains all of the numbers from 1 to 9 .

|  |  | 8 | 5 | 2 |  |  |  | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 5 |  |  |  | 4 |  | 6 | 3 |
| 3 |  | 2 | 9 |  |  |  | 7 |  |
|  |  |  |  | 7 | 9 | 6 | 3 | 1 |
| 4 |  |  |  |  |  |  |  |  |
| 6 | 1 | 9 | 2 | 3 |  |  |  |  |
|  | 3 |  |  |  | 7 | 4 |  | 2 |
| 5 | 9 |  | 8 |  |  |  | 1 |  |
| 1 |  |  |  | 6 | 5 | 7 |  |  |

5. Test your Sudoku smarts. Fill the grid below so that each column, row and $3 \times 3$ block contains all of the numbers from 1 to 9 .

|  |  | 6 |  | 4 | 8 |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | 7 |  |  |  |  | 6 |  |
|  |  | 1 |  | 9 |  | 4 |  |  |
| 3 |  | 2 |  |  |  |  | 5 |  |
|  |  |  |  | 2 |  |  |  |  |
|  | 5 |  |  |  |  | 1 |  | 3 |
|  |  | 3 |  | 1 |  | 2 |  |  |
|  | 8 |  |  |  |  | 9 |  |  |
|  |  |  | 9 | 8 |  | 3 |  |  |

## Answers



1. 29.5
2. Lily $=59$

Lily's daughter $=37$
Lily's granddaughter $=10$
3. 3,6 - each digit in the sequence is the number of letters in the numbers ONE, TWO, THREE, etc.
4.

| 7 | 6 | 8 | 5 | 2 | 3 | 1 | 9 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 9 | 5 | 1 | 7 | 8 | 4 | 2 | 6 | 3 |
| 3 | 4 | 2 | 9 | 1 | 6 | 8 | 7 | 5 |
| 2 | 8 | 5 | 4 | 7 | 9 | 6 | 3 | 1 |
| 4 | 7 | 3 | 6 | 5 | 1 | 9 | 2 | 8 |
| 6 | 1 | 9 | 2 | 3 | 8 | 5 | 4 | 7 |
| 8 | 3 | 6 | 1 | 9 | 7 | 4 | 5 | 2 |
| 5 | 9 | 7 | 8 | 4 | 2 | 3 | 1 | 6 |
| 1 | 2 | 4 | 3 | 6 | 5 | 7 | 8 | 9 |

5. 

| 9 | 3 | 6 | 5 | 4 | 8 | 7 | 1 | 2 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 8 | 4 | 7 | 2 | 3 | 1 | 5 | 6 | 9 |
| 5 | 2 | 1 | 7 | 9 | 6 | 4 | 3 | 8 |
| 3 | 6 | 2 | 1 | 7 | 9 | 8 | 5 | 4 |
| 4 | 1 | 8 | 3 | 2 | 5 | 6 | 9 | 7 |
| 7 | 5 | 9 | 8 | 6 | 4 | 1 | 2 | 3 |
| 6 | 9 | 3 | 4 | 1 | 7 | 2 | 8 | 5 |
| 2 | 8 | 4 | 6 | 5 | 3 | 9 | 7 | 1 |
| 1 | 7 | 5 | 9 | 8 | 2 | 3 | 4 | 6 |

