

N°1

$8 + 1 = 9$	$4 - 1 = 3$
$\begin{array}{r} + \\ 6 \\ \hline 1 \end{array}$	$\begin{array}{r} \times \\ 4 \\ \hline 1 \end{array}$
$8 - 2 = 6$	$4 - 2 = 2$
$\begin{array}{r} + \\ 2 \\ \hline 1 \end{array}$	$\begin{array}{r} + \\ 3 \\ \hline 1 \end{array}$
$4 + 3 = 7$	$3 + 5 = 8$
$\begin{array}{r} + \\ 9 \\ \hline 1 \end{array}$	$\begin{array}{r} \times \\ 4 \\ \hline 1 \end{array}$
$9 - 5 = 4$	$2 + 1 = 3$
$\begin{array}{r} \times \\ 9 \\ \hline 3 \end{array}$	$\begin{array}{r} + \\ 5 \\ \hline 1 \end{array}$
$8 - 2 = 6$	

N°2

$8 - 2 = 6$	$6 + 3 = 9$
$\begin{array}{r} \times \\ 4 \\ \hline 3 \end{array}$	$\begin{array}{r} + \\ 4 \\ \hline 1 \end{array}$
$4 + 2 = 6$	$2 + 4 = 6$
$\begin{array}{r} + \\ 1 \\ \hline 1 \end{array}$	$\begin{array}{r} \times \\ 4 \\ \hline 3 \end{array}$
$2 - 2 = 0$	$4 - 0 = 4$
$\begin{array}{r} + \\ 1 \\ \hline 1 \end{array}$	$\begin{array}{r} + \\ 5 \\ \hline 1 \end{array}$
$9 - 1 = 8$	$0 + 3 = 3$
$\begin{array}{r} \times \\ 4 \\ \hline 3 \end{array}$	$\begin{array}{r} \times \\ 5 \\ \hline 2 \end{array}$
$6 - 4 = 2$	

N°3

$6 - 3 = 3$	$7 + 1 = 8$
$\begin{array}{r} \times \\ 4 \\ \hline 2 \end{array}$	$\begin{array}{r} + \\ 8 \\ \hline 1 \end{array}$
$8 + 1 = 9$	$6 - 4 = 2$
$\begin{array}{r} + \\ 1 \\ \hline 1 \end{array}$	$\begin{array}{r} + \\ 4 \\ \hline 1 \end{array}$
$4 - 3 = 1$	$4 + 0 = 4$
$\begin{array}{r} + \\ 1 \\ \hline 1 \end{array}$	$\begin{array}{r} + \\ 0 \\ \hline 1 \end{array}$
$6 - 2 = 4$	$0 + 6 = 6$
$\begin{array}{r} + \\ 9 \\ \hline 1 \end{array}$	
$7 - 1 = 6$	
$\begin{array}{r} \times \\ 7 \\ \hline 2 \end{array}$	
$5 + 3 = 8$	

N°4

$6 - 1 = 5$	$5 + 2 = 7$
$\begin{array}{r} + \\ 4 \\ \hline 1 \end{array}$	$\begin{array}{r} + \\ 9 \\ \hline 1 \end{array}$
$9 - 3 = 6$	$1 + 7 = 8$
$\begin{array}{r} + \\ 1 \\ \hline 1 \end{array}$	$\begin{array}{r} + \\ 7 \\ \hline 1 \end{array}$
$0 + 4 = 4$	$4 + 3 = 7$
$\begin{array}{r} + \\ 1 \\ \hline 1 \end{array}$	$\begin{array}{r} + \\ 3 \\ \hline 1 \end{array}$
$1 + 3 = 4$	$4 - 0 = 4$
$\begin{array}{r} + \\ 9 \\ \hline 1 \end{array}$	
$4 + 2 = 6$	
$\begin{array}{r} \times \\ 4 \\ \hline 1 \end{array}$	
$0 + 6 = 6$	

N°5

$9 + 0 = 9$	$7 - 2 = 5$
$\times 5$	$\div 5$
$4 + 2 = 6$	$\times 5$
$\div 1$	$\div 2$
$5 - 2 = 3$	$3 + 2 = 5$
$\div 0$	$\div 0$
$2 + 2 = 4$	$5 - 2 = 3$
$\div 9$	$\div 8$
$\div 1$	$\div 1$
$1 + 1 = 2$	$3 + 2 = 5$

N°6

$4 - 0 = 4$	$5 - 1 = 4$
$\times 5$	$\div 5$
$2 + 2 = 9$	$\div 6$
$\div 1$	$\div 1$
$0 + 1 = 1$	$5 - 5 = 0$
$\div 3$	$\div 4$
$5 + 4 = 9$	$5 - 1 = 4$
$\times 5$	$\div 8$
$2 + 2 = 8$	$\div 7$
$\div 1$	$\div 1$
$5 - 0 = 5$	$0 + 1 = 1$

N°7

$7 + 2 = 9$	$3 - 2 = 1$
$\times 5$	$\div 9$
$3 + 6 = 9$	$\div 9$
$\div 1$	$\div 1$
$5 - 3 = 2$	$2 - 2 = 0$
$\div 2$	$\div 1$
$4 + 1 = 5$	$5 + 1 = 6$
$\div 9$	$\div 6$
$4 - 2 = 2$	$\div 1$
$\div 1$	$\div 1$
$3 - 3 = 0$	$0 + 2 = 2$

N°8

$6 - 2 = 4$	$3 + 1 = 4$
$\times 5$	$\div 5$
$9 - 1 = 8$	$\div 2$
$\div 1$	$\div 1$
$0 + 3 = 3$	$1 - 1 = 0$
$\div 3$	$\div 3$
$2 - 0 = 2$	$5 + 4 = 9$
$\times 5$	$\div 8$
$9 - 1 = 8$	$\div 5$
$\div 1$	$\div 1$
$0 + 1 = 1$	$0 + 4 = 4$

N°9

$2 + 3 = 5$	$6 + 0 = 6$
$\times 5$	$+ 8 - 3 = 5$
$\underline{1}$	$\underline{1}$
$0 + 3 = 3$	$1 + 1 = 2$
$\underline{3}$	$\underline{3}$
$5 - 0 = 5$	$5 + 4 = 9$
$+ 7$	$\times 4 + 5 = 9$
$\underline{1}$	$\underline{1}$
$2 - 2 = 0$	$4 + 1 = 5$
$\underline{2}$	$\underline{4}$

N°10

$5 + 0 = 5$	$4 + 1 = 5$
$+ 9$	$\times 8 - 1 = 7$
$\underline{1}$	$\underline{1}$
$4 - 4 = 0$	$1 + 4 = 5$
$\underline{2}$	$\underline{2}$
$3 + 2 = 5$	$3 + 6 = 8$
$+ 8$	$\times 7 - 0 = 7$
$\underline{1}$	$\underline{1}$
$1 + 4 = 5$	$0 + 3 = 0$
$\underline{1}$	$\underline{3}$

N°11

$8 - 3 = 5$	$5 + 1 = 6$
$+ 7$	$+ 8 - 1 = 7$
$\underline{1}$	$\underline{1}$
$5 - 2 = 3$	$2 - 2 = 0$
$\underline{0}$	$\underline{1}$
$5 - 2 = 3$	$6 + 3 = 9$
$\times 5$	$+ 7 + 1 = 8$
$\underline{2}$	$\underline{1}$
$5 - 5 = 0$	$4 + 1 = 5$
$\underline{5}$	$\underline{4}$

N°12

$8 + 1 = 9$	$5 + 0 = 5$
$\times 5$	$+ 4 + 5 = 9$
$\underline{4}$	$\underline{1}$
$0 + 3 = 3$	$4 + 1 = 5$
$\underline{1}$	$\underline{5}$
$7 - 2 = 5$	$8 - 6 = 2$
$+ 6$	$\times 8 + 0 = 8$
$\underline{1}$	$\underline{1}$
$3 - 3 = 0$	$6 - 6 = 0$
$\underline{3}$	$\underline{6}$

N°13

$4 - 2 = 2$	$4 + 4 = 8$
$\begin{array}{c} + \\ 7 \\ \hline 1 \end{array}$	$\begin{array}{c} + \\ 5 \\ \hline 1 \end{array}$
$+ 3 = 8$	$+ 3 = 8$
$\begin{array}{c} \times \\ 5 \\ \hline 1 \end{array}$	$\begin{array}{c} \times \\ 5 \\ \hline 4 \end{array}$
$1 - 1 = 0$	$2 - 2 = 0$
$\begin{array}{c} + \\ 2 \\ \hline 1 \end{array}$	$\begin{array}{c} + \\ 1 \\ \hline 1 \end{array}$
$2 + 3 = 5$	$2 + 3 = 5$
$\begin{array}{c} + \\ 9 \\ \hline 1 \end{array}$	$\begin{array}{c} + \\ 8 \\ \hline 1 \end{array}$
$+ 1 = 9$	$+ 1 = 9$
$\begin{array}{c} \times \\ 8 \\ \hline 4 \end{array}$	$\begin{array}{c} \times \\ 5 \\ \hline 2 \end{array}$
$1 - 1 = 0$	$1 + 4 = 5$

N°14

$8 + 1 = 9$	$7 - 2 = 5$
$\begin{array}{c} \times \\ 5 \\ \hline 4 \end{array}$	$\begin{array}{c} + \\ 2 \\ \hline 1 \end{array}$
$+ 2 = 4$	$+ 2 = 4$
$\begin{array}{c} \times \\ 6 \\ \hline 3 \end{array}$	$\begin{array}{c} \times \\ 6 \\ \hline 3 \end{array}$
$0 + 1 = 1$	$1 - 1 = 0$
$\begin{array}{c} + \\ 0 \\ \hline 1 \end{array}$	$\begin{array}{c} + \\ 0 \\ \hline 1 \end{array}$
$4 - 1 = 3$	$6 + 1 = 7$
$\begin{array}{c} \times \\ 5 \\ \hline 2 \end{array}$	$\begin{array}{c} + \\ 8 \\ \hline 1 \end{array}$
$8 - 4 = 4$	$8 - 4 = 4$
$\begin{array}{c} \times \\ 5 \\ \hline 1 \end{array}$	$\begin{array}{c} \times \\ 8 \\ \hline 1 \end{array}$
$0 + 1 = 1$	$0 + 5 = 5$

N°15

$5 - 3 = 2$	$4 + 2 = 6$
$\begin{array}{c} \times \\ 5 \\ \hline 2 \end{array}$	$\begin{array}{c} + \\ 9 \\ \hline 1 \end{array}$
$- 2 = 7$	$- 2 = 7$
$\begin{array}{c} \times \\ 5 \\ \hline 3 \end{array}$	$\begin{array}{c} \times \\ 5 \\ \hline 3 \end{array}$
$5 - 4 = 1$	$1 - 1 = 0$
$\begin{array}{c} + \\ 1 \\ \hline 1 \end{array}$	$\begin{array}{c} + \\ 1 \\ \hline 1 \end{array}$
$6 + 3 = 9$	$8 - 0 = 8$
$\begin{array}{c} \times \\ 5 \\ \hline 3 \end{array}$	$\begin{array}{c} + \\ 2 \\ \hline 1 \end{array}$
$- 6 = 2$	$- 6 = 2$
$\begin{array}{c} \times \\ 8 \\ \hline 1 \end{array}$	$\begin{array}{c} \times \\ 4 \\ \hline 1 \end{array}$
$0 + 7 = 7$	$0 + 2 = 2$

N°16

$4 + 2 = 6$	$3 + 5 = 8$
$\begin{array}{c} + \\ 9 \\ \hline 1 \end{array}$	$\begin{array}{c} + \\ 6 \\ \hline 1 \end{array}$
$+ 2 = 8$	$+ 2 = 8$
$\begin{array}{c} \times \\ 5 \\ \hline 4 \end{array}$	$\begin{array}{c} \times \\ 5 \\ \hline 4 \end{array}$
$3 - 1 = 2$	$1 - 1 = 0$
$\begin{array}{c} + \\ 7 \\ \hline 1 \end{array}$	$\begin{array}{c} + \\ 2 \\ \hline 1 \end{array}$
$9 - 8 = 1$	$3 + 3 = 6$
$\begin{array}{c} \times \\ 5 \\ \hline 4 \end{array}$	$\begin{array}{c} \times \\ 5 \\ \hline 1 \end{array}$
$- 4 = 5$	$- 4 = 5$
$\begin{array}{c} \times \\ 5 \\ \hline 1 \end{array}$	$\begin{array}{c} \times \\ 7 \\ \hline 1 \end{array}$
$5 - 5 = 0$	$5 - 2 = 3$

N°17

$8 - 4 = 4$	$5 - 0 = 5$
$\begin{array}{c} + \\ 2 \\ \hline 1 \end{array}$	$\begin{array}{c} + \\ 8 \\ \hline 1 \end{array}$
$- 1 = 7$	$- 1 = 7$
$\begin{array}{c} \times \\ 6 \\ \hline 3 \end{array}$	$\begin{array}{c} \times \\ 6 \\ \hline 3 \end{array}$
$0 + 2 = 2$	$2 - 2 = 0$
$\begin{array}{c} \div \\ 1 \end{array}$	$\begin{array}{c} \div \\ 5 \end{array}$
$7 - 1 = 6$	$2 + 7 = 9$
$\begin{array}{c} + \\ 7 \\ \hline 1 \end{array}$	$\begin{array}{c} + \\ 8 \\ \hline 1 \end{array}$
$+ 1 = 9$	$+ 1 = 9$
$\begin{array}{c} \times \\ 6 \\ \hline 5 \end{array}$	$\begin{array}{c} \times \\ 6 \\ \hline 5 \end{array}$
$4 + 4 = 8$	$1 + 3 = 4$

N°18

$5 - 1 = 4$	$1 + 3 = 4$
$\begin{array}{c} \times \\ 6 \\ \hline 3 \end{array}$	$\begin{array}{c} + \\ 9 \\ \hline 1 \end{array}$
$+ 0 = 9$	$+ 0 = 9$
$\begin{array}{c} \div \\ 1 \end{array}$	$\begin{array}{c} \div \\ 1 \end{array}$
$0 + 3 = 3$	$0 + 3 = 3$
$\begin{array}{c} \div \\ 0 \end{array}$	$\begin{array}{c} \div \\ 1 \end{array}$
$8 - 3 = 5$	$8 - 2 = 6$
$\begin{array}{c} \times \\ 6 \\ \hline 4 \end{array}$	$\begin{array}{c} + \\ 5 \\ \hline 1 \end{array}$
$- 0 = 5$	$- 0 = 5$
$\begin{array}{c} \times \\ 9 \\ \hline 5 \end{array}$	$\begin{array}{c} \times \\ 9 \\ \hline 5 \end{array}$
$8 - 8 = 0$	$3 + 1 = 4$

N°19

$7 + 1 = 8$	$7 - 0 = 7$
$\begin{array}{c} + \\ 4 \\ \hline 1 \end{array}$	$\begin{array}{c} + \\ 7 \\ \hline 1 \end{array}$
$- 1 = 6$	$- 1 = 6$
$\begin{array}{c} \times \\ 6 \\ \hline 4 \end{array}$	$\begin{array}{c} \times \\ 6 \\ \hline 4 \end{array}$
$1 + 4 = 5$	$3 - 1 = 2$
$\begin{array}{c} \div \\ 3 \end{array}$	$\begin{array}{c} \div \\ 1 \end{array}$
$7 - 1 = 6$	$6 - 2 = 4$
$\begin{array}{c} + \\ 3 \\ \hline 1 \end{array}$	$\begin{array}{c} \times \\ 4 \\ \hline 2 \end{array}$
$+ 4 = 8$	$+ 4 = 8$
$\begin{array}{c} \times \\ 8 \\ \hline 1 \end{array}$	$\begin{array}{c} \times \\ 8 \\ \hline 1 \end{array}$
$0 + 4 = 4$	$8 - 6 = 2$

N°20

$7 - 4 = 3$	$7 - 1 = 6$
$\begin{array}{c} \times \\ 6 \\ \hline 4 \end{array}$	$\begin{array}{c} + \\ 9 \\ \hline 1 \end{array}$
$- 3 = 6$	$- 3 = 6$
$\begin{array}{c} \div \\ 1 \end{array}$	$\begin{array}{c} \div \\ 1 \end{array}$
$2 - 0 = 2$	$2 + 1 = 3$
$\begin{array}{c} \div \\ 2 \end{array}$	$\begin{array}{c} \div \\ 4 \end{array}$
$6 - 2 = 4$	$4 + 5 = 9$
$\begin{array}{c} \times \\ 6 \\ \hline 3 \end{array}$	$\begin{array}{c} + \\ 9 \\ \hline 1 \end{array}$
$- 3 = 6$	$- 3 = 6$
$\begin{array}{c} \times \\ 6 \\ \hline 5 \end{array}$	$\begin{array}{c} \times \\ 6 \\ \hline 5 \end{array}$
$6 - 3 = 3$	$0 + 4 = 4$

Règles

- ① Le Garam est un jeu de logique mathématique à base d'opérations simples.
- ② Remplissez chaque case avec un seul chiffre de sorte que chaque ligne et chaque colonne forment une opération correcte.
- ③ Le résultat d'une opération verticale est un nombre à deux chiffres si deux cases suivent le symbole égal.
- ④ Exemple : ordre de réalisation possible : (1) (2) (3) ...

The image shows a 4x4 Garam puzzle grid. The grid is divided into four 2x2 quadrants. Each quadrant contains a 2x2 grid of cells. The operations are as follows:

- Top-Left Quadrant:**
 - Row 1: $1 + 1 = 2$ (Red 1, 1, 2; Green (8), (6))
 - Row 2: $9 \times 7 = 63$ (Black 9, 7; Green (5), (6))
 - Row 3: $1 \times 1 = 1$ (Red 1, 1, 1; Green (9), (7))
 - Row 4: $0 + 4 = 4$ (Red 0, 4, 4; Green (10), (7))
- Top-Right Quadrant:**
 - Row 1: $6 - 2 = 4$ (Red 6, 2, 4; Green (2), (3))
 - Row 2: $6 \times 2 = 12$ (Black 6, 2; Green (1), (3))
 - Row 3: $4 - 0 = 4$ (Red 4, 0, 4; Green (4), (18))
 - Row 4: $1 + 1 = 2$ (Black 1, 1; Green (1), (3))
- Bottom-Left Quadrant:**
 - Row 1: $9 - 4 = 5$ (Red 9, 4, 5; Green (12), (11))
 - Row 2: $8 \times 9 = 72$ (Black 8, 9; Green (15), (13))
 - Row 3: $7 \times 1 = 7$ (Red 7, 1, 7; Green (13), (14))
 - Row 4: $2 + 2 = 4$ (Red 2, 2, 4; Green (14), (14))
- Bottom-Right Quadrant:**
 - Row 1: $4 + 1 = 5$ (Red 4, 1, 5; Green (17), (19), (20))
 - Row 2: $4 \times 1 = 4$ (Red 4, 1, 4; Green (17), (19), (20))
 - Row 3: $2 \times 2 = 4$ (Black 2, 2; Green (16), (23))
 - Row 4: $4 + 0 = 4$ (Red 4, 0, 4; Green (21), (22))