Tic-Tac-Toe Products

1	2	3	4	5	6
7	8	9	10	12	14
15	16	18	20	21	24
25	27	28	30	32	35
36	40	42	45	48	49
54	56	63	64	72	81

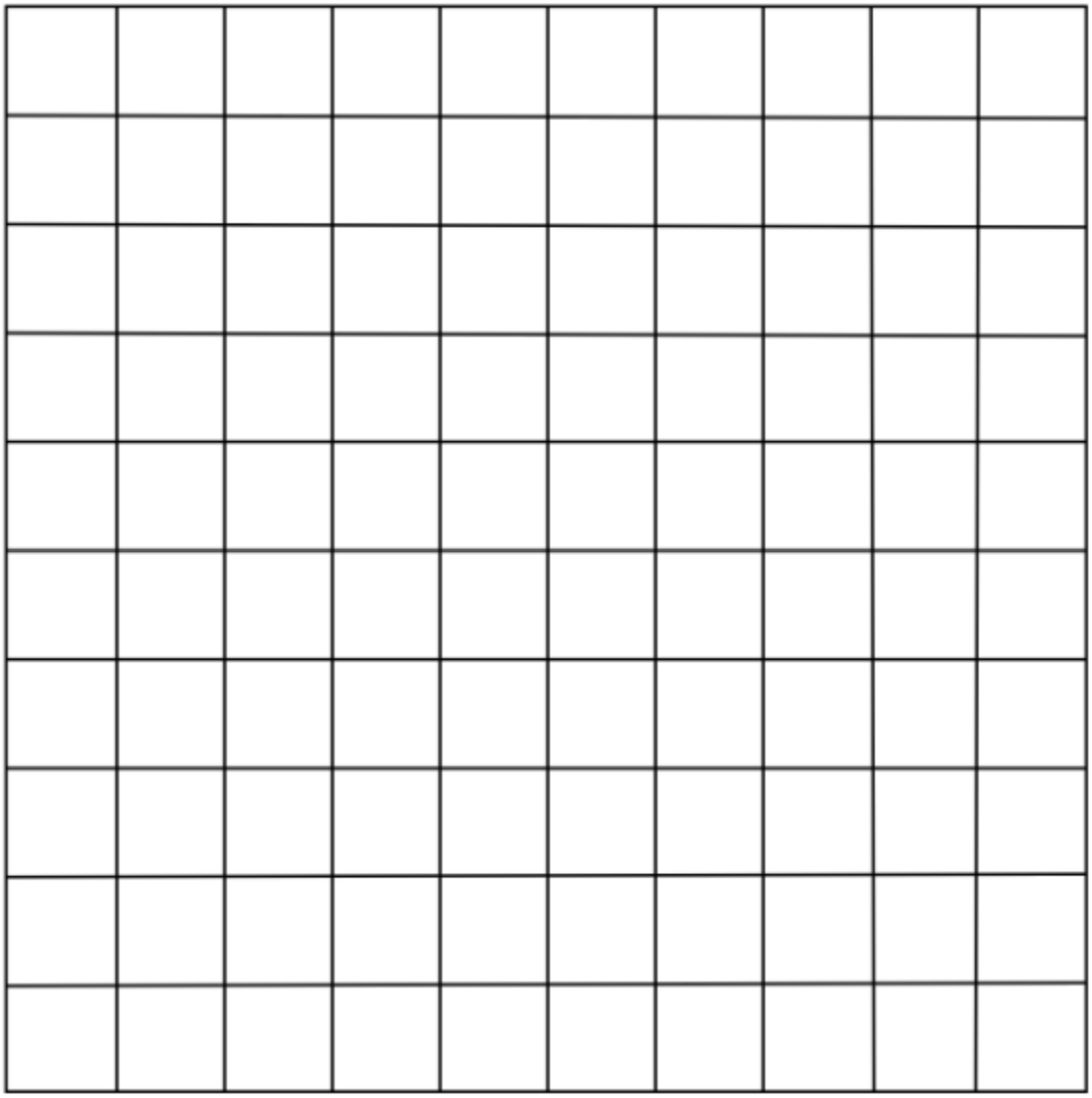
1 2 3 4 5 6 7 8 9

Rules for Tic-Tac-Toe Products

2 Players

- Player 1 and Player 2 each select a number between 1 and 9 at the bottom of the page and then place one of their markers under that number.
- Player 1 then moves one of the two markers to a new number.
- Player 1 then places a marker on the grid covering the product of the two numbers.
- Player 2 then moves ***only*** one marker to make a new sum and then places one of their markers on that product on the grid.
  - The markers ***can*** both be placed under the same number. For example 6 x 6 = 36 is allowed.
- Players alternate moving one marker at a time and continue placing their markers on the grid until a player has marked four products in a row.
- Rows can be horizontal, vertical or diagonal.
- After the game players should discuss their strategies.

How Close to 100?



1. _____ x _____= _____
2. _____ x _____= _____
3. _____ x _____= _____
4. _____ x _____= _____
5. _____ x _____= _____
6. _____ x _____= _____
7. _____ x _____= _____
8. _____ x _____= _____
9. _____ x _____= _____
10. _____ x _____= _____

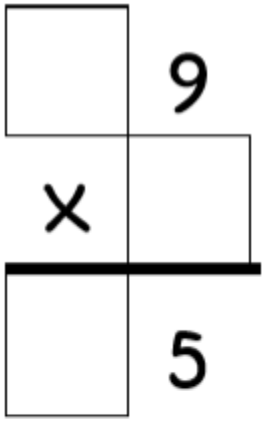
Rules for How Close to 100

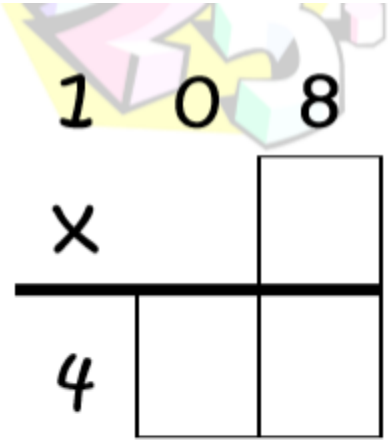
- This game is played in partners. Two children share a blank 100 grid.
- The first partner rolls two number dice.
- The numbers that come up are the numbers the child uses to make an array on the 100 grid.
- They can put the array anywhere on the grid, but the goal is to fill up the grid to get it as full as possible.
- After the player draws the array on the grid, she writes in the number sentence that describes the array.
- The second player then rolls the dice, draws the number grid and records their number sentence.
- The game ends when both players have rolled the dice and cannot put any more arrays on the grid.
- How close to 100 can you get?

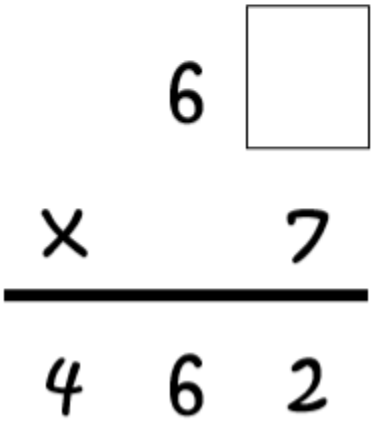
Variation

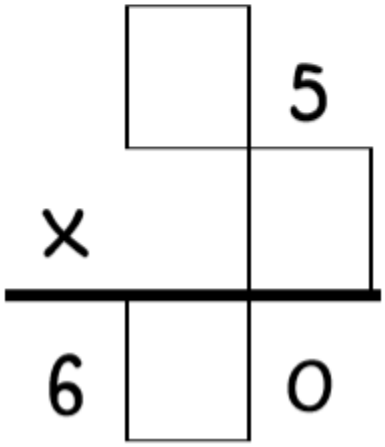
Each child can have their own number grid. Play moves forward to see who can get closest to 100.

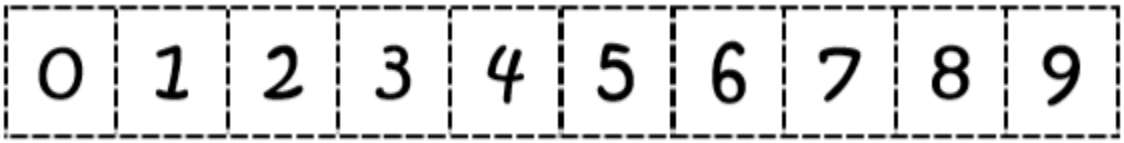
Use all the numbers from 0 to 9 (once each) to fill in the blanks so that all the equations are true. Tip! Cross out numbers when you are sure they are in the right place.







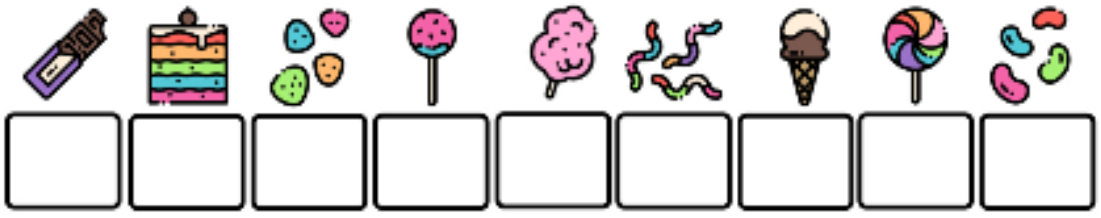




Ready for a Sweet Challenge?

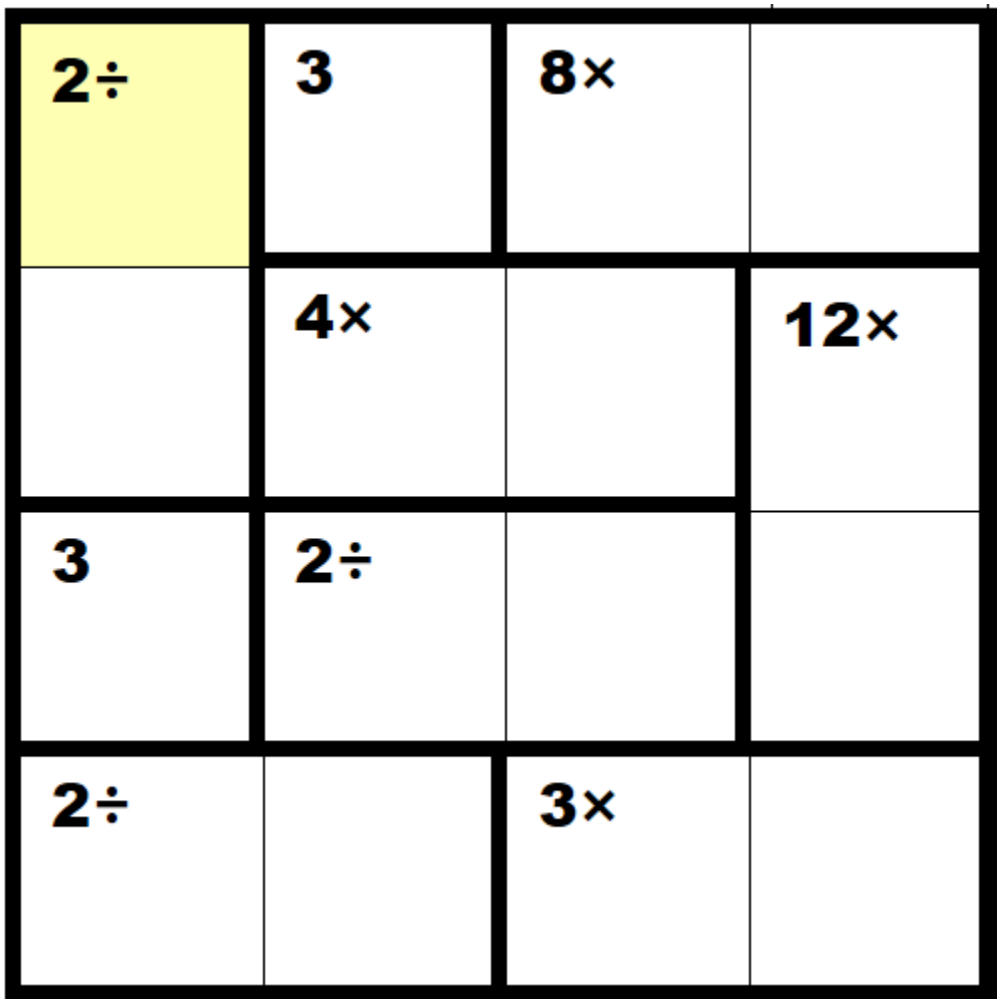
Find the value of each icon in the multiplication table below:

		7	
8			
	8		24
			144



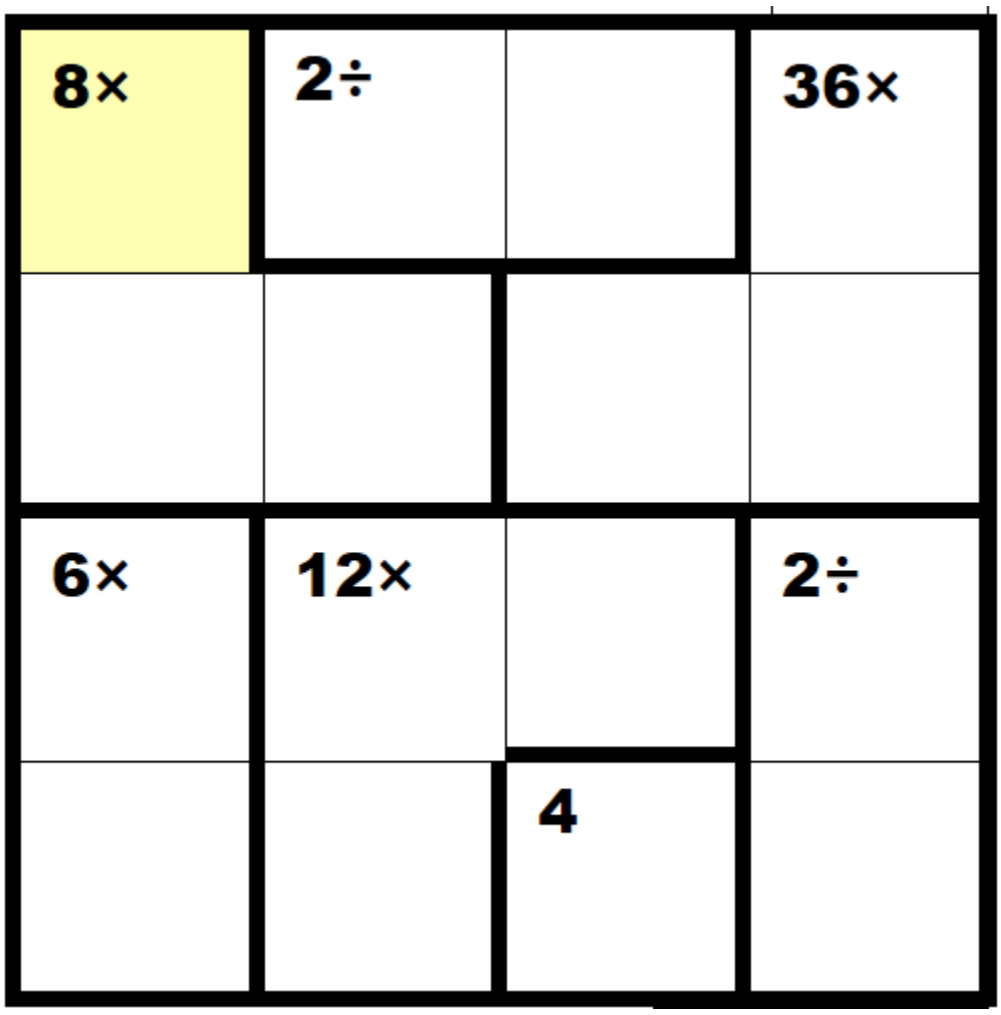
Ken Ken (easier)

- The only numbers you may write are 1, 2, 3, or 4. (A 6x6 puzzle requires 1 through 6.)
- No numbers may appear more than once in any row or column. (That is, all required numbers must appear in every row and column.)
- Each "cage" (region bounded by a heavy border) contains a "target number." If there's more than one cell in the cage, the target is also accompanied by an arithmetic operation. You must fill that cage with numbers that produce the target number, using only the specified arithmetic operation. Numbers may be repeated within a cage, if necessary, as long as they do not repeat within a single row or column.
- In a one-cell cage, just write the target number in that cell.



Ken Ken (Medium Difficulty)

- The only numbers you may write are 1, 2, 3, or 4. (A 6x6 puzzle requires 1 through 6.)
- No numbers may appear more than once in any row or column. (That is, all required numbers must appear in every row and column.)
- Each "cage" (region bounded by a heavy border) contains a "target number." If there's more than one cell in the cage, the target is also accompanied by an arithmetic operation. You must fill that cage with numbers that produce the target number, using only the specified arithmetic operation. Numbers may be repeated within a cage, if necessary, as long as they do not repeat within a single row or column.
- In a one-cell cage, just write the target number in that cell.



Fill the grid with the numbers 1 to 36 to make a non-stop connecting path.
You may connect the numbers horizontally and vertically (not diagonally).
You must connect all 36 numbers.

	36			29	
34	33			24	27
		21	22		
		20	1		
15	12			7	4
	13			6	

17					28
	19			26	
		21	32		
		36	33		
	12			5	
10					1

	3	6	7	10	
1					12
24		22	21		13
25		19	20		36
28					35
	30	31	32	33	

23					
	25	30	29	34	
	26			1	
	19			16	
	12	13	14	15	
10					5

Addition Fubuki Puzzle

Place the numbers 1 to 9 in the 3 by 3 grid so that each horizontal and vertical line adds up to the given sum. You can use each number only once.
Some numbers are already placed for you.

	5		10
	3		17
			18
17	17	11	

5		7	16
			16
			13
14	13	18	

		6	10
			19
		9	16
10	12	23	

			13
			17
2		9	15
11	15	19	

1			12
	5		15
			18
7	15	23	

			14
	1		16
		9	15
16	10	19	