

Math Challenge #6



First Name: _____
 Last Name: _____
 Grade: _____
 Teacher: _____

KenKen puzzles

Math challenge #9 is all about KenKen—a type of math and logic puzzle invented by a Japanese math teacher, Tetsuya Miyamoto. KenKen comes from the Japanese word for cleverness. Try this fun challenge and turn in your answers by February 9, no later than 3 p.m. Everyone who submits the required solutions will receive a Valentine duck. Good luck!

Kinder, First, and Second Grade: solve at least 2 puzzles.

Third and Fourth Grade: solve at least 4 puzzles.

Fifth and Sixth Grade: solve at least 7 puzzles.

Instructions:

- Do not repeat a number in any row or column.
- The numbers in each heavily outlined set of squares, **cages**, must combine (in any order) to produce the target number in the top corner of the cage using the mathematical operation indicated. For example, the notation 6+ means that the numerals in the cage should add up to 6, and the notation 48x means that by multiplying the numbers in the cage you will get 48.
- Cages with just one box should be filled in with the target number in the top corner.
- A number can be repeated within a cage as long as it is not in the same row or column.

Fill in with the numbers 1, 2, 3.

3+		4+
4+	2	
	5+	

Fill in with the numbers 1, 2, 3.

4+	3	5+
5+		1

Fill in with the numbers 1, 2, 3, 4.

7+	4+		2
	9+	3+	5+
1	9+		

Fill in with the numbers 1, 2, 3, 4.

3+	8+		
	6+	7+	6+
7+			
		3+	



Fill in with the numbers 1, 2, 3.

6X		
	2X	6X
3		

Fill in with the numbers 1, 2, 3, 4.

12X		3+	2÷
5+	3-		
		12X	4+
3+			

Fill in with the numbers 1, 2, 3, 4, 5..

9+		6+		
5+		11+		
6+	9+		9+	3
		10+		6+
1				

Fill in with the numbers 1, 2, 3.

3X		4X
6X		
		3

Fill in with the numbers 1, 2, 3, 4.

3-	1-		2-
	3+	7+	
1-			2÷
	3-		

Fill in with the numbers 1, 2, 3, 4, 5.

2-	9+		2-	6+
	2-			
2-	4-		4	
	2-		3-	9+
2-		2		



Extension:

Fill in with the numbers 1, 2, 3, 4, 5.

60×			1	6×
9+	9+			
	2÷	3-		
2÷		17+		
	4	2-		

Fill in with the numbers 1, 2, 3, 4, 5.

2÷	4-		9×	3-
	1-			
2-		7+		
	2÷		1-	7+
4-		2		

Fill in with the numbers 1, 2, 3, 4, 5, 6.

120×	11+		1-		2÷
	13+		4×		
				1-	
12×		5-		18+	
5-		3-			
	3-		2÷		

This one is super hard! Any one dare?

