

# The Math NINJA!!!

(Adding 4-digit numbers really fast)

Here's a simple math (addition) trick that will demonstrate to your students that you are truly a Math Ninja! You will be able to add a series of 4-digit numbers (2 or 3 as well, but 4 is more impressive!) faster than most folks and even faster than a \$11.75 calculator!

Here's the set-up:

1. Ask **someone** to give you any 4-digit number: Ex:    >>>    **4567**  
(Now you already know the answer will be >>> **24,565**)
2. Ask **someone else** to give you another 4-digit number: >>>    **2345**
3. Now it's **your turn** to come up with a 4-digit number: >>>    **7654**  
(notice that your number added to the one above it results in 9999!)
4. Ask someone else to come up with a 4-digit number: >>>    **6079**
5. It's back to your turn again: >>>    **3920**  
(Remember you need a number that adds to 6079 to make 9999 again!) + \_\_\_\_\_
6. Quickly add those 5 numbers together and your answer should be: **24,565**

## What's Going On?

To arrive at the answer (sum of the 5 numbers) you add a **2** in front of the first number (the 4) and subtract **2** from the 'ones' digit (7) to arrive at the answer.

Why???

Because the sums of step 2 and step 3 equals 9999 and the sums of step 4 and step 5 also equals 9999.

So we are essentially adding 20,000 (9999 + 9999) minus 2!

Hence, put a '2' in front of the first number and subtract '2' from the 'ones' position!!!

To make it more difficult for someone to figure how you solved this so quickly, you can make variations by

- a) make the sums equal to only 9998, but this time subtracting '4' from the 'ones' position! (can you figure out why???)
- b) adding another 2 steps (their number and yours), you would now put a '3' in front and subtract '3' in the 'ones' position.)
- c) make your own variation!