## **Lightning Addition**

Ask your friends to give you two 3-digit numbers. Write them in columns on a board or large sheet of paper.

For example, they say: and:

In your head, working from left to right, subtract each digit of this second number from 9 and quickly write: They give you another 3-digit number (for example):

Subtract from 9 as before and write:

Invite them to race you in adding these figures. While they're still fumbling with their calculators you scrawl down the correct answer – **instantly**: 697 their number652 their number999

347 your number321 their number

999

+678 your number

2,695

**SECRET:** With the numbers you so casually and quickly contributed, you made 2 groups of 999. Think of as 1000 (it's only one less). Add 1,000 + 1,000 = 2,000. Add 2,000 to the top figure (simply put 2 in the thousands column), subtract 2 from the ones column and you have your lightning mathemagical answer!

**Hint:** When you add your numbers to the problem, pretend the audience is too slow in giving you numbers so you are writing down any old digits just to speed up the pace. Never let on that you are doing mental gymnastics to get those digits.

**EXTENSION:** Try the trick with 4 or 5-digit numbers.

## **Miracle Number Prediction**

Announce that you will read your audience's mind. Ask someone to hold an envelope in which you have sealed your prediction of their mathematical thoughts.

Ask the audience to write down a number made of 3 different digits: (the first and last digits must differ by more than one)	937
Tell them to reverse the number and subtract the smaller number from the larger:	-739
Have them reverse the difference and add:	198 +891
The answer will be:	1,089

Now ask the envelope keeper to open your prediction and read it aloud. Amazing telepathy! Little do they know the answer will **always** be: **1,089**.