

THE POWER OF THE PLACE



Hi, I'm Professor Panda!
Let's look at my magic chalkboard and review the concept of place value.

PLACE VALUE CHART

Thousands			Ones		
H	T	O	H	T	O
u	s	u	u	s	u
d	s	d	d	s	s
r		s	r		s
e			e		
d			d		
		4	3	7	5

The chart shows us that we have:

$$\begin{aligned}
 5 \text{ ones} &= 5 \\
 7 \text{ tens} &= 70 \\
 3 \text{ hundreds} &= 300 \\
 4 \text{ thousands} &= 4,000 \\
 \text{Add them up and you get: } &4,375
 \end{aligned}$$

In order to understand the value of a digit, you have to recognize its place value!



Hi! My name is Lupita. Here's a neat addition timesaver that Professor Panda taught me.



How would you find the answer to a problem such as: $837 + 541 + 85 = ?$

Would you put the numbers in a column, and then add like this? \rightarrow

$$\begin{array}{r}
 837 \\
 541 \\
 + 85 \\
 \hline
 \end{array}$$

Well, there's a quick way to get the right answer without copying all those numbers.

STEP 1: First, add up all the numbers in the ones place. $5 + 1 + 7 = 13$. The 3 is your answer's *ones digit*. Carry the 1 over any number in the tens place.

$$\begin{array}{r}
 1 \\
 837 + 541 + 85 = \quad 3
 \end{array}$$

STEP 2: Now, add up all the numbers in the tens place. $1 + 8 + 4 + 3 = 16$. The 6 is your answer's *tens digit*. Carry the 1 over any number in the hundreds place.

$$\begin{array}{r}
 1 \quad 1 \\
 837 + 541 + 85 = \quad 63
 \end{array}$$

STEP 3: Add up all the numbers in the hundreds place. $1 + 5 + 8 = 14$. The 4 is your answer's *hundreds digit*. Since there are no numbers in the thousands place, put the 1 in the thousands place of your answer.

$$\begin{array}{r}
 1 \\
 837 + 541 + 85 = \quad 1,463
 \end{array}$$

Now, use this method to find the sums for the problems below.

- 1) $567 + 292 + 305 =$
- 2) $70 + 88 + 215 =$
- 3) $834 + 35 + 126 =$
- 4) $394 + 37 + 56 =$



Remember, when you do math, keeping the place value positions in mind will help you to avoid errors.