Rounding

The rules of rounding

1. Look at the digit *right after* the digit you are rounding to. (It helps to draw a line between the digit you are rounding to and the next one.)
   - If that digit is **0, 1, 2, 3, or 4, then round down.**
     So 6,|**4**98 rounded to the nearest thousand is 6,000.
   - If that digit is **5, 6, 7, 8, or 9, then round up.**
     So 6,|**5**01 rounded to the nearest thousand is 7,000.
2. In both cases, change all of the digits to zeros *after* the digit you are rounding to (6,**000**; 7,**000**).
3. When you round *up*, the digit in the place that you are rounding to increases by one.

The squiggly equals sign (" ≈ ") is read "is about," or "is approximately."

Now study these examples:

When rounding to the nearest THOUSAND, change the hundreds, tens, and ones digits to zeros.	When rounding to the nearest HUNDRED THOUSAND, change all of the digits after the hundred thousands place to zeros.
23,|**8**02 ≈ 24,|000 2,980,|**0**97 ≈ 2,980,|000	3,8|**6**7,300 ≈ 3,9|00,000

Notice carefully: If you are rounding up, and the digit that you need to increase by one is a 9, you have to make it a 10, which means the digit in the *next higher* place *also* increases by one.

Here is a simpler way to understand it: just look at the *two* (or three or four) digits to the left of your rounding line, and increase that "number" by one:

1,32**9**|**5**09 ≈ 1,33**0**|**0**00	14**9**,9|**8**2,371 ≈ 15**0**,0|00,000	39,99**5**|,391 ≈ 40,00**0**|,000
The "29" changes to "30."	The "499" changes to "500."	The "3999" changes to "4000."

1. Round these numbers as indicated.

number	2,017,249	38,802,155	82,009,709	217,299,204
to the nearest 1,000				
to the nearest 10,000				
to the nearest 100,000				
to the nearest million				