

### HW 3

1. In hexadecimal, do the following:  $C91E+88D$ ,  $61A-55D$ ,  $B8 \times 7F$ .
2. Translate the Roman numerals on Old Main and the Science Center into Hindu-Arabic.
3. Write the following Hindu-Arabic numerals as traditional Chinese numerals:  
3, 12, 42, 570, 9086
4. Write the following Hindu-Arabic numerals as ionic Greek numerals:  
5, 63, 902
5. Do the following using each of the numeration systems discussed in class Friday:  
 $12+3$ ,  $49-14$ ,  $17 \times 5$ ,  $63/21$ . Before simply finding the answer using the Hindu-Arabic numerals, try to do it in the numeration system. This will give you a feel for what the ancients had to work with.
6. What are pros and cons of the following numeration systems: traditional Chinese, Ionic Greek?
7. Find out about another numeration system not discussed in class and give a brief description of it. Include a reference.
8. Create your own numeration system. Don't spend too much time on this!

Chinese numerals:

<http://www.mandarintools.com/numbers.html>

Greek ionic numerals:

[http://en.wikipedia.org/wiki/Greek\\_numerals](http://en.wikipedia.org/wiki/Greek_numerals)