Base Number System
Application Questions

1. Convert the numbers 12, 34, and 87 into:
   a. Binary (Base 2):

   b. Quinary (Base 5):

   c. Nonary (Base 9):

2. Convert your year of birth into base number system of your choice (other than decimal).

3. Convert the following numbers into decimal number system
   a. 643- septenary (base 7):

   b. 010110 –binary (base 2):

   c. 333- octal (base 8):

4. Explain why it was important in the previous question that the base number system in which the number is represented is indicated.

5. What limitations are we faced with base number systems larger than the base 10 number system?

6. Add the numbers 14 and 18 in the ternary (base 3) number system.

7. Subtract 17 from 56 in the heximal (base 6) number system.

8. Multiply 13 by 8 in quaternary (base 4) number system.

9. Divide 98 by 7 in the octal (base 8) number system.