

Solve the following problem. Write a short explanation of how you solved the problem. Use your own paper.

HONOR statement: You are to do the work on your own – do NOT work together or ask any other professor, lab director, or student for help. You MAY use your textbook but do NOT use the Instructor's manual. Signature: _____

1. Write a letter to the parents of your students explaining why the curriculum includes arithmetic of the ancient computation systems Egyptian, Roman, Babylonian, and Mayan. Your grade will be determined by the completeness of your answer in regards to connections with our base-10 system and with contexts to other topics.
2. Represent the number **9825** in the following systems. Explain what each representation means – show how you determined the representation.
Base 8
Mayan
Babylonia
Base 10
Egyptian
Chinese (see #13, page 174)
3. Write the first 10 rows of Pascal's triangle. Explain the connection between the 8th row and a base-2 number.