

Math 123-01  
Summer 2025  
Dr. Lily Yen

# Quiz 2

Show all your work

Name: \_\_\_\_\_  
Number: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Score: \_\_\_\_/11

**Problem 1:** Convert  $5136_{10}$  into base 4.

Score: /2

**Problem 2:** The following Mayan numeral has three places. Express it as a Hindu-Arabic numeral.



Score: /2

**Problem 3:** The following Kaktovik numeral has 4 places. Find its Hindu-Arabic numeral.



Score: /2

**Problem 4:** Convert  $168748_{10}$  to a Babylonian numeral.

Score: /2

**Problem 5:** In the Dungeon Theatre of the Dragones, the seats are arranged 7 in a row to the left of the stage and 9 in a row to the right of the stage. Suppose the extended family of Fire Horse gathers to see a show in the Dungeon Theatre; if they all sit on the left of the stage, there are 4 members of the family without a seat. If they all sit on the right of the stage, there are 7 empty seats. Find the second smallest possible number of seats the Dungeon Theatre may have.

Score: /3

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