

Math 123-02  
Fall 2024  
Dr. Lily Yen

# Quiz Two

Show all your work

Name: \_\_\_\_\_  
Number: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Score: \_\_\_\_/15

**Problem 1:** Convert  $5471_8$  into binary.

Score: /2

**Problem 2:** Express the Hindu-Arabic numeral 968 in Mayan numeral.

Score: /2

**Problem 3:** Write 9846 as a Kaktovik numeral.

Score: /2

**Problem 4:** Translate MDCLXIX to Hindu-Arabic base-10 numeral.

Score: /2

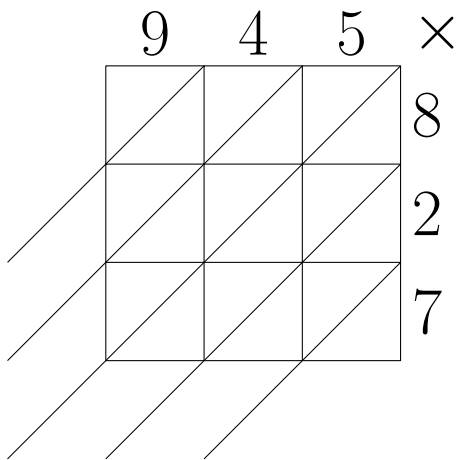
**Problem 5:** Translate the following Babylonian numeral to Hindu-Arabic base-10 numeral.

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Score: /2

/10
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**Problem 6:** Multiply  $945 \times 827$  using the galley method.



Score: /2

**Problem 7:** In the Dungeon Theatre of the Dragons, the seats are arranged 6 in a row to the left of the stage and 8 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 5 members of the family without a seat. If they all sit on the right of the stage, there are 7 empty seats. Find the first two smallest possible numbers of seats the Dungeon Theatre may have.

Score: /3