

Graded Homework Assignment 1

I. Complete the following Base 5 Problem Set:

Addition table:

+	0	I	Λ	N	M
0					
I					
Λ					
N					
M					

Multiplication table:

x	0	I	Λ	N	M
0					
I					
Λ					
N					
M					

A. Fill in the tables.

B. Convert: $M N \Lambda$ to a base 10 number so that you will know its value.

$$\begin{array}{r} \text{Add: } \Lambda I M \\ + \Lambda 0 I \\ \hline \end{array} \quad \begin{array}{r} M I M 0 \\ + \Lambda M \Lambda \\ \hline \end{array} \quad \begin{array}{r} I \Lambda I 0 \Lambda \\ + M I \Lambda \\ \hline \end{array}$$

$$\begin{array}{r} \text{Multiply: } \Lambda I M \\ \times \Lambda \\ \hline \end{array} \quad \begin{array}{r} M I M \\ \times \Lambda I \\ \hline \end{array} \quad \begin{array}{r} I \Lambda N \\ \times M 0 I \\ \hline \end{array}$$

II. Write the base 10 numerals in Babylonian numerals:

1. 230

2. 45

3. 1007

4. 18

III. Convert the Babylonian numerals to base 10 numerals:

1. ◀◀ ▼▼▼

2. ▼◀▼

3. ▼ ▼

4. ◀◀◀ ▼▼▼
◀◀ ▼▼