

Modular Arithmetic

All problems are in modulus 10 arithmetic.

1. Create an addition table
2. Create a multiplication table
3. Decode 747 666 4747 where the coding formula is $C=3L+1$
4. Find the three integer products that give 1 as the answer.
5. Find the three values of $1/3$.
6. Find the three values of $0/3$.
7. Multiply the above answers by 3
8. Find the seven values of $1/7$
9. Multiply the above answers by 7.
10. Find the 7 values of $7/7$
11. Find the integer values of $1/7, 2/7, 3/7, 4/7, 5/7,$ and $6/7$
12. Evaluate $1/3 \times 1/9$ using integer equivalents.
13. Evaluate $1/3 \times 1/9$ as a fraction and convert answer to integer equivalent.