# Crypt-Arithmetic Problem: SEND + MORE = MONEY

## Python Code

from itertools import permutations  
  
def solve\_crypt\_arithmetic():  
 letters = 'SENDMORY'  
 digits = '0123456789'  
 for perm in permutations(digits, len(letters)):  
 s, e, n, d, m, o, r, y = map(int, perm)  
 if s == 0 or m == 0:  
 continue  
 send = 1000 \* s + 100 \* e + 10 \* n + d  
 more = 1000 \* m + 100 \* o + 10 \* r + e  
 money = 10000 \* m + 1000 \* o + 100 \* n + 10 \* e + y  
 if send + more == money:  
 print(f"SEND = {send}, MORE = {more}, MONEY = {money}")  
 break  
  
solve\_crypt\_arithmetic()

## Output

SEND = 9567, MORE = 1085, MONEY = 10652