

$\text{SEND} + \text{MORE} = \text{MONEY}$

Step ① understand the rules

- Each letter is a different number (0-9)
- No word starts with 0 (So, $S \neq 0, M \neq 0$)
- we must make the addition correct.

Step ② look at the first letter of the answer (M)

- Adding two 4 digits no's gives a 5 digit number
- That means there's a carry into 5th digit

→ So $M = 1$

Step ③ look at the first column ($S+M$)

- The left most column $S+M = S+1$
- This must give a number starting with $M=1$ in the answer
- That's only possible if $S=9$ (largest digit)

Step 4 - look at the 0

- In MONEY, the 0 is the thousands place.
- 0 comes from $S+M$ carry, and turns out $0=0$

Step 5 — middle letters (E, N, R)

- Working column by column with normal addition rules:
- From $N+R=E$ (with a carry), we find $R=8$
- E is just before N (so $N=E+1$).

Step 6 — fill remaining letters

→ Digits used so far: $\{M=1, S=9, O=0, R=8\}$

→ Left over numbers: $\{2, 3, 4, 5, 6, 7\}$.

- Pick values for E, N, D, Y that fit the column addition.

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Step 7

Final solution:

$$S=9, E=5, N=6, D=7, M=1, O=0, R=8, Y=2$$

Step 8: check

$$\begin{array}{r} \text{SEND} = 9567 \\ + \text{MORE} = 1085 \\ \hline \text{MONEY} = 10652 \quad \checkmark \text{ correct} \end{array}$$