Handout: Magic Threes Extension

How can we make this look like the previous problem? . . .

Starting with three numbers: N_1, N_2, and N_3

1. What combinations could we possibly have, using each number at most once? [For instance, $N_1 + N_2$ is one.]
2. From our three numbers N_1, N_2, and N_3, make FOUR new numbers as follows:

$$\begin{aligned} M_1 &= 0 \\ M_2 &= N_1 \\ M_3 &= N_1 + N_2 \\ M_4 &= N_1 + N_2 + N_3 \end{aligned}$$

   Compare the differences of the M's with the combinations from the first question.
3. What does the *Magic Threes* Handout tell us about these four M's?
4. What does question (3) tell us about the three N's?