

A set of ten cards, each showing one of the digits from 0 to 9, is divided up between five envelopes so that there are two cards in each envelope. The sum of the two numbers inside it is written on each envelope:

7	8	13	14	3
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What numbers could be inside the envelopes?

What are the possible ways of making the numbers on the envelopes?

Which number has the fewest possible combinations? It might be worth starting from this envelope and looking at what could be in the others.

This is a tricky problem. You will need to show lots of patience, perseverance and resilience. You might find it easier to use cards and envelopes to do this practically.