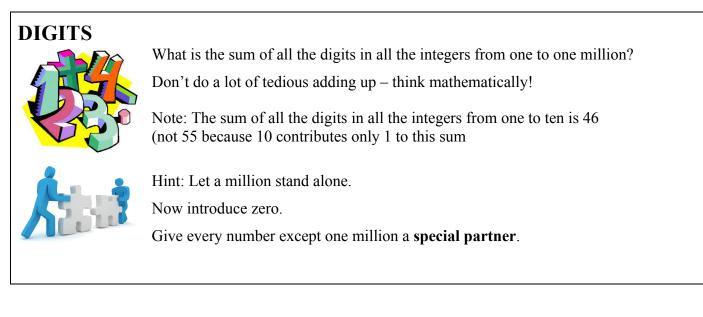


AFRICAN INSTITUTE FOR MATHEMATICAL SCIENCES

SCHOOLS ENRICHMENT CENTRE (AIMSSEC)

AIMING HIGH



Help

"Think of all the numbers from 0 to 499 999. Take partners from the numbers from 500 000 to 999 999".

Extension

Try the activity Sandwich Puzzle. Suppose you have two 1's, two 2's and two 3's.



Arrange these six digits in a list so that: between the two 1's there is one digit giving 1?1, between the two 2's there are two digits giving 2??2, between the two 3's there are three digits giving 3???3.

Can you do the same if you only have 1's and 2's? Explain your answer. Can you do the same if you include two four's, and between the two 4's there are four digits? What about two 1s, 2s, 3s, 4s and 5s?

https://aiminghigh.aimssec.ac.za/years-6-to-12-sandwiches/