

RESTAURANT STEMcooking THE MENU

MATERIAL

1 A4 size card with a menu consisting of several starters, main courses and desserts.

Calculator, pen and paper

GAME

Nine friends to celebrate the birthday of one of them are going to eat at the Stemcoking restaurant.

Show the letter

Ask one of them to choose a menu, that is, an entree, a main dish and a dessert. With the calculator you must calculate the total price that you are going to pay for the food among all and write it down on a piece of paper.

Tell him to tell us the first and last number of the total price and I will tell him how much the food will cost.

MATH JUSTIFICATION

The game is based on the divisibility criterion of the nine: A number is a multiple of nine if the sum of all its figures are multiples of nine. Also, if a number is multiplied by nine, the result is a multiple of nine.

EXAMPLES:

The number 3452 is a multiple of 9? NO, because $3 + 4 + 5 + 2 = 14$ which is not a multiple of 9

$9 \cdot 25$ is a multiple of 9? YES, because $9 \cdot 25 = 225$ and $2 + 2 + 5 = 9$ which is a multiple of 9

APPLICATION TO THE GAME

When saying that there will be 9 diners, the number they get will always be a multiple of 9.

With the prices we have all the products that can be made have 3 figures, so if we give the first and the last we will only have to calculate the central using the divisibility criterion of the 9