A Weekly European Challenge

1, Example:

Find out the target number 24
With the given numbers : 2   3   8   1   15

You have to find 24 using only the given numbers 2, 3, 8, 1 and 15.
You can use addition, subtraction, multiplication and division and you can use any process as many times as you want.
Each given number can be used only once. It is not compulsory to use all the given numbers.

2, How to count the points?

This challenge can be done in many ways : one pupil, in pair, in group...

You obtain one point for one addition or one multiplication
You obtain two points for a subtraction.
You obtain three points for a division.

Three more points if all the given numbers are used.
Three more points if addition, subtraction, multiplication and division are all used.

You are a « Mathador » if you use all the given numbers and if addition, subtraction, multiplication and division are all used. In this case, you win thirteen points !

3, Here are some examples:

a. 3 x 8 = 24	1 point	e. 15 + 8 = 23 23 + 2 = 25 25 − 1 = 24	4 points
b. 15 + 8 = 23 23 + 1 = 24	2 points	f. 3 x 8 = 24 24 : 1 = 24	4 points
c. 2 + 1 = 3 3 x 8 = 24	2 points	g. 15 + 8 = 23 23 + 3 = 26 26 − 2 = 24 24 : 1 = 24	7 points
d. 15 − 3 = 12 12 x 2 = 24	3 points	h. 8 + 1 = 9 9 : 3 = 3 15 − 3 = 12 12 x 2 = 24	13 points : « Mathador »