

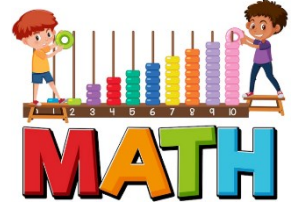
## Homework 1

Upload your source code file from *DEUZEM SAKAI* until **November 20, 2022, 23:55**.

Upload only a single \*.cs file.

The name of the file : **number\_name\_surname.cs**

For example : 2022510028\_mehmet\_ali\_yildirim.cs



### I Love Math

Write a C# program that takes the value of  $x$  (between 2 and 50), the value of  $y$  (between 25 and 30), and the type of the operator  $\Delta$  (\* or +) from the user, and then finds the result of the following mathematical formula after 25 terms using nested loops.

$$\frac{\min(2x\Delta 5x, y!)}{1^1 + 3^1} + \frac{\min(5x\Delta 8x, (y-1)!)}{3^2 + 5^2 + 7^2} - \frac{\min(8x\Delta 11x, (y-2)!)}{5^3 + 7^3 + 9^3 + 11^3} + \frac{\min(11x\Delta 14x, (y-3)!)}{7^4 + 9^4 + 11^4 + 13^4 + 15^4} - \frac{\min(14x\Delta 17x, (y-4)!)}{9^5 + 11^5 + 13^5 + 15^5 + 17^5 + 19^5} + \dots$$

This example formula shows the first 5 terms.

Don't use Math functions like Math.Pow() and Math.Min().

This homework will be graded by Res.Asst.Dr. Göksu TÜYSÜZOĞLU.

You can ask your questions to her from the “**FORUM → Homework 1 - Questions**” part of the *DEUZEM SAKAI* software.

### Notes:

1. Your program must work correctly under all conditions. Try to control all possible errors.
2. You should use meaningful variable names, appropriate comments, and good prompting messages.
3. If you are late, your grade will be decreased 10 points for each day.  
After five days, your assignment will not be accepted.
4. If you want, you may write your own “*procedures / functions*”.  
If you want, you may use an *array* data structure.
5. Assignment must be your individual work.  
**Cheating** is strictly prohibited.  
If any cheating occurs, your assignment will be graded with **zero (0)**.  
A software will be used to automatically detect the similarities between students' source-codes.