

# Day 1: Standard Deviation Puzzles #1

## Objective

In this challenge, we practice calculating *standard deviation*.

## Task

Find the largest possible value of  $N$  where the standard deviation of the values in the set  $\{1, 2, 3, N\}$  is equal to the standard deviation of the values in the set  $\{1, 2, 3\}$ .

Output the value of  $N$ , correct to two decimal places.

## Output Format

Your output must be a floating point/decimal number, correct to a scale of **2** decimal places. You can submit solutions in either of the **2** following ways:

1. Solve the problem manually and submit your result as *Plain Text*.
2. Submit an *R* or Python program, which uses the above parameters (hard-coded), and computes the answer.

Your answer format should resemble something like:

4.23

(This is **NOT** the answer, just a demonstration of the answering format.)