Introduction

Thomas started playing a new computer game. In this game you have to gain experience points to reach the next level. But you do not know how many points you need, until you reach the next border.

Thomas is curious about how many experience points are needed to reach the 200th level.

He searches in different forums and finds the following formula, which is supposed to compute the experience points:

$$\frac{l}{e} \times x \times 2^{\frac{1}{y}}$$

x and y are integers in range 0 to 100. The solution of the formula is rounded.
Challenge (1/2)

Thomas wrote down the experience points needed for the first 80 levels:

30, 66, 107, 156, 213, 278, 354, 441, 542, 656, 787, 936, 1106, 1299, 1518, 1766, 2046, 2362, 2719, 3122, 3574, 4083, 4655, 5297, 6018, 6825, 7729, 8740, 9872, 11137, 12549, 14127, 15887, 17849, 20037, 22475, 25190, 28213, 31576, 35316, 39476, 44098, 49235, 54939, 61274, 68304, 76105, 84759, 94356, 104996, 116789, 129857, 144333, 160366, 178119, 197772, 219523, 243592, 270218, 299670, 332239, 368248, 408055, 452050, 500667, 554381, 613716, 679252, 751622, 831529, 919743, 1017113, 1124575, 1243157, 1373992, 1518327, 1677534, 1853121, 2046751, 2260251
Challenge (2/2)

Your task is to help Thomas to find the 200th value of the sequence.

The solution consists of the 198th, 199th, and the 200th value of the sequence. Please enter the solution with commas between the three values (without spaces).