**Hamming Numbers**

A hamming number is a positive integer of the form 2*i*3*j*5*k*, for some non-negative integers *i, j,* and *k.* They are utilized in a multitude of fields, such as music theory, number theory, and even appear when analyzing the masting interval of bamboo!

Write a function that compute the 1,200th smallest hamming number. For example, here are the first 5 hamming numbers:

* The first hamming number is 1 (2*0*3*0*5*0*).
* The second hamming number is 2 (2*1*3*0*5*0*).
* The third hamming number is 3 (2*0*3*1*5*0*).
* The fourth hamming number is 4 (2*2*3*0*5*0*).
* The fifth hamming number is 5 (2*0*3*0*5*1*).

**Input:** There will be no input.

**Output:** The 1,200th smallest hamming number.

**Explanation:** A hint to steer you in the right direction: another way to look at a hamming number is a number that only consists of multiples of 2, 3, or 5. Nothing else.