2) (10 pts) ANL (Algorithm Analysis)

A program takes $O(n^3)$ time to process data about a map with **n** points of interest. For n = 100, the program completes in 25 milliseconds. The time limit for running the program has been set at a maximum of 12.8 seconds. What is the largest value of **n** for which the program is expected to complete within the time limit?