

Problem Willie

Input File: WillieIn.txt

Output File: WillieOut.txt

Project File: Willie

Inspired by the recent Olympics in Turin, your great-uncle Willie has decided to get in shape with his eye on a gold medal in the 2008. Every morning he takes a brisk walk around his living room counting his strides as he walks. Last evening he called you quite upset that none of the Olympic events were measured in strides.

When you suggested he simply “convert”, great-uncle Willie became quite agitated and responded that he “was not about to change his faith at this point in his life”. To calm great-uncle Willie, you have promised to write a program that converts his strides to meters, so that he can target an event and realize his life long dream of becoming an Olympic champion (without changing his faith).

Inputs

The first line of the file will contain two real numbers: the length of great-uncle Willie’s stride measured in feet, and the number of feet in a meter. This line will be followed by the length of great-uncle Willie’s five most recent walks measured in strides, one walk per line.

Outputs

There will be six lines of output. The first five lines of output will be the length of each walk in meters, one walk distance per line. These will be in the same order as the input distances. The final output will be the average distance of great-uncle Willie’s five most recent walks.

Sample input

2.1 2.28

103

200

120

500

31

Sample output

94.8684

184.211

110.526

460.526

28.5526

175.737