

[F] Circle Packing

Time limit: 1 second
Memory limit: 65535 kBytes

Description

There are six unit-diameter disks. Arrange the disks in the plane so that no two overlap, and the size of the smallest square covering all of them is minimized. Compute and report this minimum size.

Input

There is no input for this problem.

Output

Output a real number representing the side length of the square.
Print your answer rounded to six decimal digits, in the format `X.XXXXXX`.