# Problem B: Basic Geometry

Competitive programming problems are notorious for having irrelevant preamble. Instead of just getting to the point and asking you to solve a problem, they have long-winded stories about people (who don't matter) doing things (of no particular relevance), just to fill space on the page. It's really quite obnoxious. Why waste everybody's time, when all you want to do is ask a simple problem? Surely problem-writers could do everybody a favour and just skip the paragraphs of irrelevant text that they love to place at the beginning of the problem.
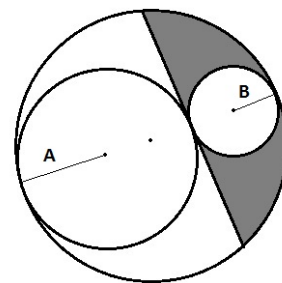
Some experienced problem solvers adopt the tricky strategy of reading the second paragraph first, and then deciding whether the first is worth reading. Alas, this strategy is not foolproof: sometimes even the **second** paragraph of the problem statement is utterly useless! Drat these silly problem-writers. When will they ever learn?

Construct a circle with radius A. Construct another circle of smaller radius B that touches the first. Construct a third circle with radius $A+B$ that touches both of your first two circles and also has its center on the same line as the line between the first two centers. Finally, draw in the tangent to the first two circles inside the largest circle. This will give you the diagram shown above.

Find the area of the shaded region, given A and B.

Input Specification:

There will be multiple test cases. Each test case consists of two positive real numbers: $A \leq 50$ and $B \leq 50$, separated by a space, on their own line. Input ends on EOF.

Output Specification:

Output to three decimal places (rounded) the area of the shaded region.

Sample Input:

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4 1
3 2
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Sample Output:

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8.041
16.771
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