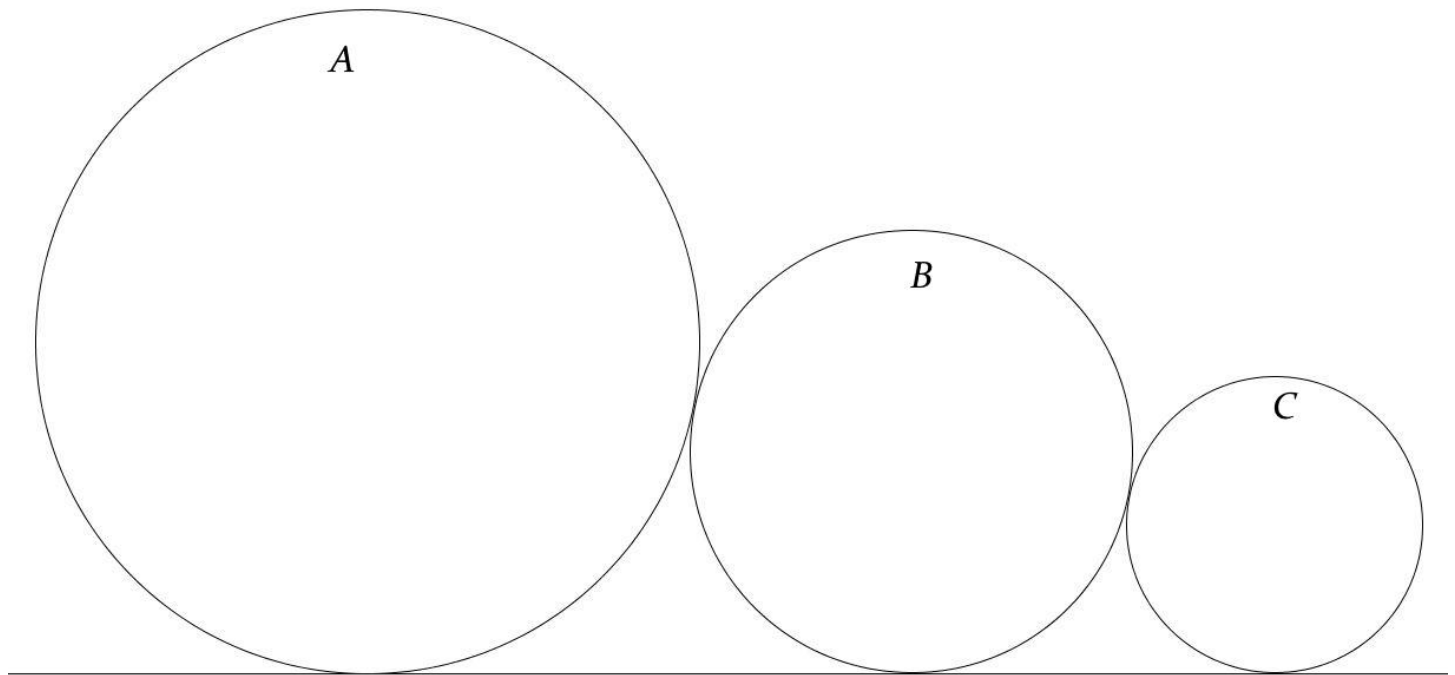# Pi Mu Epsilon
Problem of the Month
January 2017

The three circles below are all tangent to the *x*-axis. Circle *A* has a radius of 9 and is tangent to circle *B*. Circle *C* has a radius of 4 and is also tangent to circle *B*. Find the radius of circle *B* that makes the centers of circles *A*, *B*, and *C* collinear.

Problem of the Month Rules:
⌘ Submissions must include a complete mathematical justification along with the answer.
⌘ Submissions may only be made by individuals or groups of two and must be dated.
⌘ Due date: January 30, 2017 before 5 p.m.; they may be given to Dr. Phillip Poplin or Dr. David Shoenthal.

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