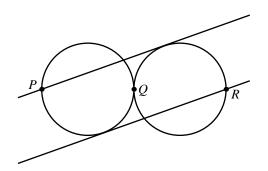
## ILLINOIS INSTITUTE OF TECHNOLOGY Department of Applied Mathematics and IIT SIAM Student Chapter Mathematics Department of Constitution

## Math Weekly Problem Competition

## Friday, October 03, 2014

Two circles of radius 1 are tangent to each other at point Q. PQ and QR are diameters of the two circles. From P a tangent is drawn to the circle with diameter QR, and from R a parallel tangent is drawn to the circle with diameter PQ. Find the distance d between two tangent lines.



## Join the competition!

The Department of Applied Mathematics and IIT SIAM Student Chapter is organizing a weekly campus-wide math competition for undergraduate students.

- ▷ Every Friday 3pm, visit http://math.iit.edu/~weeklyproblem to view the problem of the week
- ▷ Submit the solution to weeklyproblem@math.iit.edu by Wednesday 5pm
- $\triangleright$  The author(s) of the first correct solution(s) will receive a monetary prize

For more details view the official web site http://math.iit.edu/~weeklyproblem. Become a Math Club member and receive problem notifications by email.

Good Luck! Have fun and enjoy Mathematics!

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