

Problem 7: Maximize Angle

Let C be a circle with center O , and let Q be a point inside C different from O . Where should a point P be located on the circumference of C to maximize the angle $\angle OPQ$?

As always, show your work, fully explain and justify your answer. A solution mainly obtained by computers or calculators will not be accepted.

Posting Date 11/22/2019. Submit solutions to Noah Aydin, Mathematics Department, RBH 319 (e-mail or hard-copy, but hard copy submissions must include a time stamp) by 11:59 pm on 12/8/2019.