LEWIS AND CLARK COLLEGE
Department of Mathematical Sciences

PUZZLE OF THE WEEK (10/12/2016 - 10/18/2016)

Let $A_1 A_2 ... A_n$ be a regular polygon inscribed in a circle of radius 1. Find, with justification, the maximum value of

$$|PA_1| \cdot |PA_2| \cdot ... \cdot |PA_n|$$

as P ranges over the circumcircle. (Here $|PA_k|$ denotes the length of the line segment PA_k.)

- Puzzle of the Week #6 was correctly solved by David Lovitz and Fisher Ng, although Iva has to admit that she couldn't fully understand some steps in their solutions. Congratulations nonetheless!

- One possible solution of the Puzzle #6 is posted online. (Look for the Puzzle of the Week announcements on the departmental web-page.)

- Solvers of this week's puzzle should include their name, address, and status at the College. Solutions should be submitted to **Iva Stavrov** in BoDine 305; email submissions are encouraged (istavrov at lclark). Solutions should be received by the end of the day on **Tuesday, October 18th 2016**.