LEWIS AND CLARK COLLEGE
Department of Mathematical Sciences

PUZZLE OF THE WEEK (10/19/2016 - 10/25/2016)

Let n be a positive integer. Find, with proof, the value of the sum

$$1 - \binom{n}{2} + \binom{n}{4} - \binom{n}{6} + ...$$

- Correct solutions to Puzzle of the Week #7 were submitted by David Lovitz and Fisher Ng; David's solution is complete and fully justified. Congratulations to both students!

- One possible solution of the Puzzle #7 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 25th 2016**.