



LEWIS AND CLARK COLLEGE  
Department of Mathematical Sciences

---

PUZZLE OF THE WEEK (1/16/2017 - 1/31/2017)

In a convex polyhedron with  $m$  triangular faces (and possibly faces of other shapes), exactly four edges meet at each vertex. Find the minimum possible value of  $m$ , and justify your claim.

---

- Correct solutions of the Puzzle of the Week #1 were submitted by 9 students: Leo DiGiosia, Chris Karagiannis, Max Levin, Fisher Ng, Emily O'Sullivan, Hannah Posey-Scholl, Karlie Schwartzwald, Sara Stout and Elias Williamson. Only the first two students provided complete justifications of their answers. Nonetheless: congratulations to all 9 students!
- One possible complete solution of the Puzzle #1 is posted online. (Look for the Puzzle of the Week announcements on the departmental webpage.)
- Solvers should include their full name and some kind of a contact information. 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 **January 31st, 2017**.