



LEWIS AND CLARK COLLEGE

Department of Mathematical Sciences

PUZZLE OF THE WEEK (2/10/2016 - 2/16/2016)

A square is intersected by n lines, no three of which go through the same point. It is known that each of these lines divides the square into two trapezoids whose areas are in a $2 \div 3$ ratio. What is the largest value of n ? Justify your claim.

- Correct solutions of the Puzzle of the Week #3 were submitted by Toby Aldape, Leo Di Giosia and Brian Gentry. Congratulations!
- Iva thanks Brian Gentry for the solution involving almost Moore digraphs.
- One possible solution of the Puzzle #3 is posted online. (Look for the Puzzle of the Week announcements on the departmental web-page.)
- 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 **Tuesday, February 16th 2016**.