



LEWIS AND CLARK COLLEGE  
Department of Mathematical Sciences

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PUZZLE OF THE WEEK (2/2/2017 - 2/8/2017)

Suppose  $a_1, a_2, \dots, a_{2017}$  and  $b_1, b_2, \dots, b_{2017}$  are two permutations of the set of numbers  $1, 2, 3, \dots, 2017$ . Find, with proof, the minimum value of

$$a_1b_1 + a_2b_2 + \dots + a_{2017}b_{2017}.$$

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- Correct solutions of the Puzzle of the Week #2 were submitted by 5 students: Andres Guerrero-Guzman, Gerrick Hegarty, Chris Karagianis, Fisher Ng, and Karlie Schwartzwald. Only the first student provided a completely rigorous justification of his answer. Nonetheless: congratulations to all 5 students!
  - One possible complete solution of the Puzzle #2 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 **February 8th, 2017**.