Problem of the Week   Week 6 , Due February 24, 11:59pm   NAME:_____

NAU Email:_____

Please write clean, neat and complete solutions to the problem in order to recieve full credit. Your job is to convince me, or really anybody who reads this document, that you understand the problem and are able to communicate what you are thinking. Please submit your solutions through Gradescope (https://www.gradescope.com) by the indicated deadline. You might need to create an account with your NAU email. To enroll in the Problem of the Week course use entry code: NYZ56P. Good luck and have fun!

PROBLEM. A Root Lateral Riddle

The side lengths of a convex quadrilateral, in this order, are $\sqrt{a}, \sqrt{a+3}, \sqrt{a+2}$, and $\sqrt{2a+5}$. The length of each diagonal is $\sqrt{2a+5}$. Determine the greatest angle of the quadrilateral.