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David Thompson* (dthomp9@students.towson.edu) and **Diana Cheng** (dcheng@towson.edu). *Complex Mazes with Simple Paths: Mathematics within the Art of Classical Labyrinths.*

Classical labyrinths / mazes, constructed using parts of concentric semi-circles and quarter-circles, are aesthetically visually pleasing and inherently have a wealth of mathematical relationships. We show the results of in-service and pre-service middle and secondary teachers' exploring patterns within the solution paths of labyrinths. The order of circuits traversed while solving the labyrinth, i.e, traveling from the outside to the inside of the labyrinths, can be defined algebraically as a function of the number of total circuits in the labyrinth. We also present labyrinth-based activities designed to address the Common Core State Standards for Mathematical Practice #4, Model with Mathematics. (Received September 16, 2015)