

Chapel Hill Math Circle
Beginners Group (1-3)
February 27, 2016

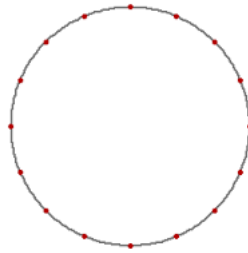
1. A very special island is inhabited only by knights and knaves. Knights always tell the truth and knaves always lie. You meet two inhabitants and they make certain statements. Can you determine what they are?

Ted: Between Zippy and me, exactly one is a knight.

Zippy: Ted is a knave.

2. Pick a partner and play the following game. Sixteen points are marked on a circle. Two players take turns drawing segments that connect any two points. The segments cannot cross each other. The player who draws the last segment wins.

- a. Who wins this game and why?



- b. Who wins if the number of points is 15 and why?