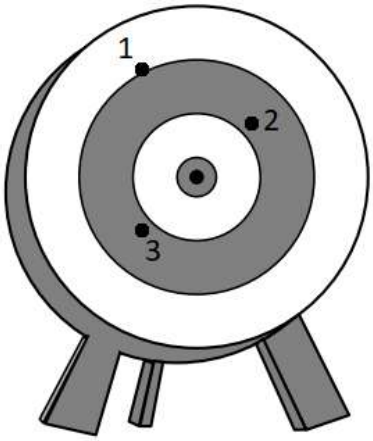
Pythagorean Theorem Enrichment Name:_____

Bull's-Eye

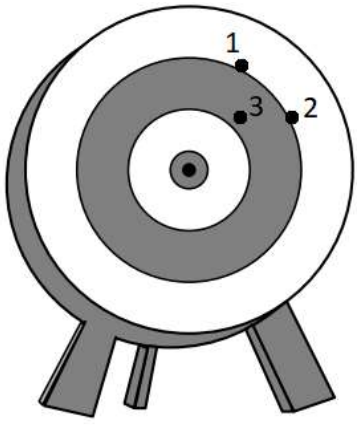
Friar Tuck and Little John are having an archery competition. The winner will advance to the final round against Robin Hood. Each competitor will take three shots at the target. The winner will be determined by the sum of the distances between the three arrows and the bull's-eye.

In medieval times, "string length" was used to determine the winner. Starting at the bull's-eye, string was wrapped around the first arrow, back to the bull's-eye, and then around the second and third arrows in the same manner. The judges did this for both competitors and then compared the two string lengths. The competitor with the shortest string length was declared winner.

Use the results of Friar Tuck's and Little John's competition to determine who advances to the final round against Robin Hood. Explain your answer.



Friar Tuck



Little John

<u>Friar Tuck</u>
Shot 1: 1 in. left, 2 in. high
Shot 2: 1 in. right, 1 in. high
Shot 3: 1 in. left, 1 in. low

<u>Little John</u>
Shot 1: 1 in. right, 2 in. high
Shot 2: 2 in. right, 1 in. high
Shot 3: 1 in. right, 1 in. high