Broken Pottery

A “sherd” is part of a piece of pottery that one might dig up at an archaeological site where pottery-making people once lived. Archaeologists usually want to figure out how big the original piece of pottery was, as that can tell them something about who might have made the piece and when it was made.

Using the sherd shown below, devise a method for determining the diameter of the original plate.

Extra: Can you come up with another method?