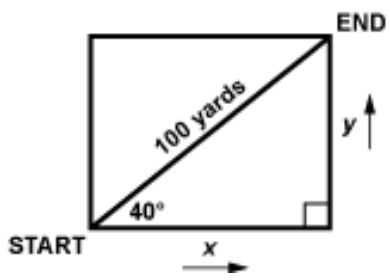A rectangular park had a dirt path across its diagonal that was 100 yards long. The diagonal and the long side of the park formed an angle that measured $40°$.

A person walked along the sidewalks outside the park, from the start to the end of the path, as shown by the arrows.

Which expression shows the distance that he walked?