Gopher Security

Gopher Security Company has been hired to create a security system for the Portland Museum to guard the famous Hope Diamond. They will be installing a laser bean triggered security system. You will help them determine the distance the beam will travel around the room to protect the diamond. If the beam is broken, the alarm will be triggered.

The display box will be placed in the center of the room.

The beam travels from the sensor at point A to sensor B to sensor C to sensor D and back to sensor A.

What is the total distance the beam will travel around the room?

Show all work and reasoning to complete the task.

