

Prelab:
Exploring the earth's interior
Please show all work!

Name: _____

1. What is the diameter of the Earth in kilometers?

2. If a seismic wave travels 11 km/sec through the entire Earth, how long will it take to get to the other side)

3. What is the angle of a ?
4. What is the $\sin(a)$?
5. If the circle represents the earth, what is the value of B in kilometers?
6. The sine of an angle is equal to the opposite divided by the adjacent sides of a right triangle. As a result, $\sin(a) = C/B$. Solve for C .
7. What is the straight line distance from b to c ? (Note the answer is not the same as the question above.)

