Problem of the Week
Problem E
Exclusive Areas

A and B lie on the circumference of the circle with centre O, radius 2, and $\angle AOB = 90°$.

Another circle, with diameter AB is drawn. O lies on the circumference of this second circle.

The unshaded region is the area common to both circles. The shaded region is the area in one circle or the other circle but not in both. Determine the area of the shaded region in the diagram.