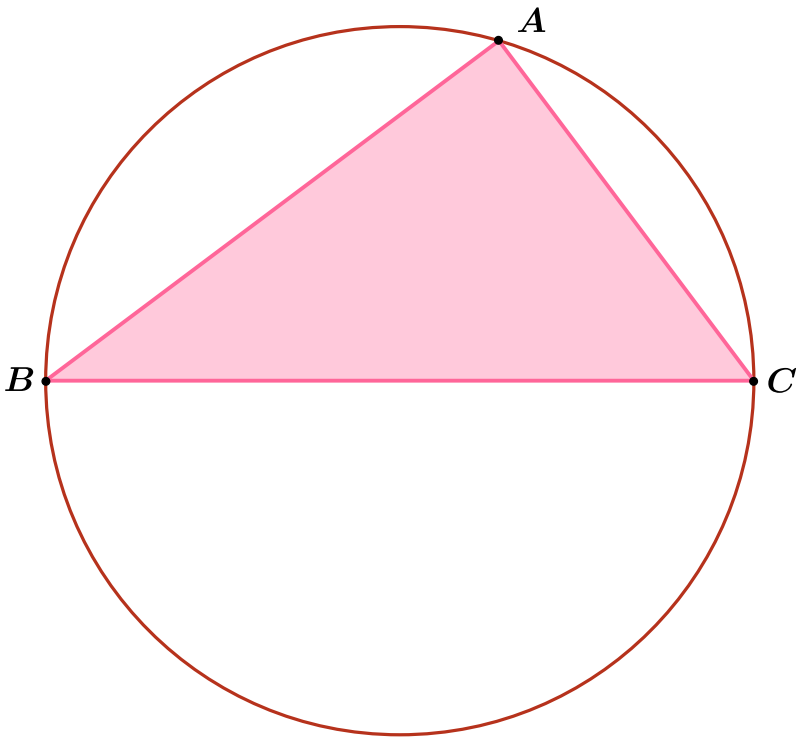
Problem of the Week

Problem D

Out of the Shade



$\triangle ABC$ is inscribed in a circle with vertices B and C located at the endpoints of a diameter and the third vertex, A, on the circumference of the circle so that $AB = 16$ cm, $AC = 12$ cm, and $BC = 20$ cm.

Determine the area of the unshaded region of the circle. Express the area as an exact answer involving π. Then state the area correct to the nearest hundredth cm^2.