



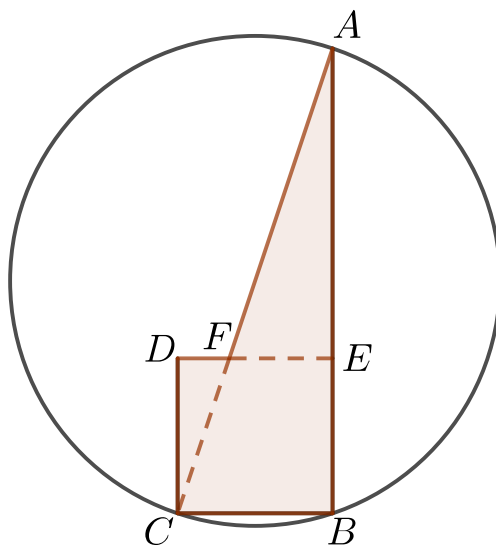
Problem of the Week

Problem E

What's Left?

$BCDE$ is a square with sides of length 20 cm. BE is extended to A such that the area of $\triangle ABC$ is twice the area of the square. The figure $ABCD$ is enclosed in a circle with diameter AC and point B on the circumference of the circle. (The diagram represents the information from the problem but is not necessarily drawn to scale.)

Determine the area inside the circle but outside figure $ABCD$.



NOTE: We know that this circle can be drawn because of a property of circles: The angle inscribed in a semi-circle is 90° . In this case, $\angle ABC = 90^\circ$ and AC is the diameter.

