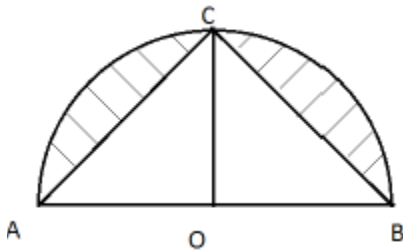


Answer on Question #29047 – Math – Geometry

Question

A triangle is placed in a semicircle with a radius of 7mm. Find the area of the shaded region. Use the value 3.14 for π ; and do not round your answer. Be sure to include the correct unit in your answer.

Solution



$$S = S_{\text{semicircle}} - S_{\text{triangle}}$$

$$S_{\text{semicircle}} = \frac{1}{2}\pi r^2 = \frac{1}{2} * 3.14 * 49 = 76.93$$

$$S_{\text{triangle}} = \frac{1}{2}CO * AB = \frac{1}{2} * 7 * 14 = 49$$

$$S = 76.93 - 49 = 27.93$$

Answer: 27.93 mm².