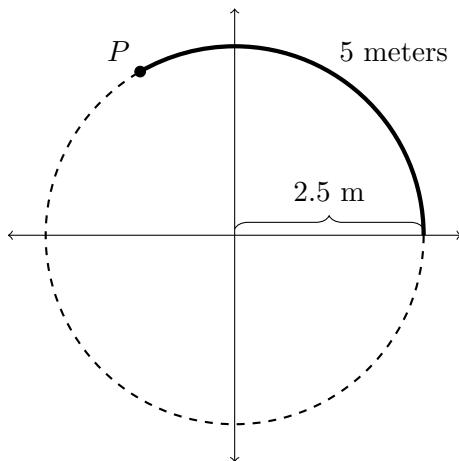**5.** [6 points] The parts of the question below are unrelated.

    a. [3 points] The circle below is centered at the origin and has a radius of 2.5 meters. The arc shown in bold has a length of 5 meters. *Give the coordinates of P in exact form or rounded to at least three decimal places.*

Coordinates of $P =$ _____

    b. [3 points] Trying to find the cosine of 310 *degrees*, Sofia enters cos(310) into her calculator and gets −0.52534763851. How does she immediately know that something is wrong? *Draw a picture* and explain in words how Sofia knows her calculator must not have been in "degree mode"?