

SOML MEET 3
EVENT 2
Circles

NAME: _____
TEAM: _____
SCHOOL: _____

1. [2 Points] The circle formed by the middle lane of a circular running track can be described algebraically by $x^2 + y^2 = 4$, where all measurements are in miles. If you run around the track's middle lane twice, approximately how many miles have you covered? Report your answer to the nearest tenth of a mile.

ANS: _____

2. [3 Points] The general form for the equation of a circle is $Ax^2 + By^2 + Cx + Dy + E = 0$. Write the general form of the equation of the circle with center $(-2, 3)$ and passing through $(3, -2)$.

ANS: _____

3. [5 Points] Find the area of the donut-shaped region bounded by the graphs of $(x-2)^2 + (y+3)^2 = 25$ and $(x-2)^2 + (y+3)^2 = 36$. Leave your answer exact.

ANS: _____

