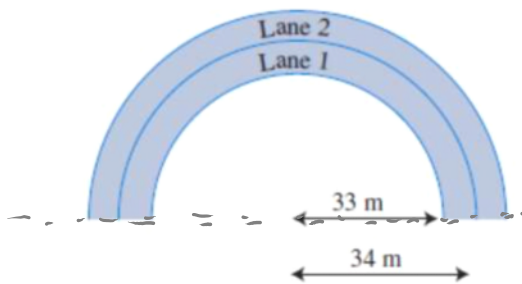


4.1 Day 2

Wednesday, February 6, 2019 7:25 PM

Designing a Running Track:

The running lanes at the Emery Sears track at Bluffton College are 1 meter wide. The inside radius of lane 1 is 33 meters and the inside radius of lane 2 is 34 meters. How much longer is lane 2 than lane 1 around one turn? (See Figure 4.5.)



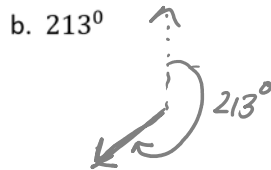
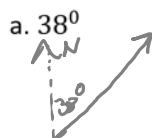
$$\begin{array}{r} 34\pi \\ - 33\pi \\ \hline \pi \end{array}$$

$S = r\theta$ radians

$\theta = \pi$

Bearing (course) is measured clockwise from due north. It is sometimes given as the angle of the line of travel.

Example: sketch a diagram of a ship on the given course



c. A boat that starts on a course of 15° for 3 miles and then changes to a course of 115°

