

Test Yourself



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Design the Race Track

The designers of a race track desire the centerline distance around the facility to be 3.42 miles in length. The track shape is shown in the figure (not drawn to scale). It is symmetric to points

MF. Site constraints require the distance MF is one mile. The ratio of the radius at M to the radius at F has to be 1.5:1 (That is, $R_M = 1.5R_F$.) What will be the area within the track centerline? Consider all this “given” information to be exact. Compute the area to the nearest 0.01 acre.

HINT: While this is a surveying problem of the type which we as surveyors may have to solve one day, it would not be appropriate examination material. You can expect an “iterative solution.” *AS*

