## 8 Performance Task (continued)

## Finding the Area and Perimeter of a Track

How can you use formulas you already know to find the area and perimeter of a composite figure?

The six-lane track shown is made up of a rectangle and two semicircles.



**1.** In the straightaways, each lane is a rectangle. What is the area of each lane in the straightaways? What is the total area of the six lanes in one of the straightaways?

**2.** What is the perimeter of each lane in the straightaways? What is the perimeter of the larger rectangle made up of the six lanes in one of the straightaways?

## 8 Performance Task (continued)

## Finding the Area and Perimeter of a Track

**3.** What is the area of the inner field? Use 3.14 for  $\pi$  and round your answer to the nearest hundredth.

4. What is the area of the entire track (the inner field and the lanes)? Use 3.14 for  $\pi$  and round your answer to the nearest hundredth.

5. What is the perimeter of the entire track? Use 3.14 for  $\pi$  and round your answer to the nearest hundredth. Explain your reasoning.