

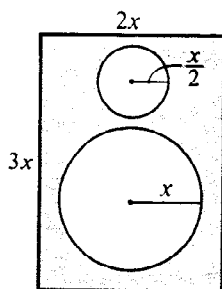
66. a. The swimming pool in Problem 64a is painted with sealers that cost \$0.80 per square foot for the sides and \$1.20 per square foot for the bottom of the pool. Write a polynomial that gives the cost of sealing the pool.
 b. How much would it cost to seal the pool in Problem 64b?

■ For Problems 67–70 see Example 12.

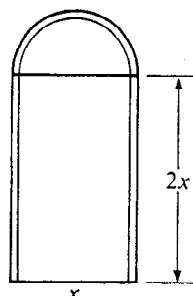
67. Writewell, Inc. makes fountain pens. It costs Writewell $5x + 400$ dollars to manufacture x pens, and the company receives $13x - 0.005x^2$ dollars from the sale of the pens.
 a. Write an expression for the profit Writewell earns from the sale of x pens.
 b. What is the profit (or loss) on the sale of 600 pens?
68. It costs The Sweetshop $4x + 200$ dollars to produce x pounds of chocolate creams. The company brings in $8.8x - 0.004x^2$ dollars on the sale of the chocolates.
 a. Write an expression for The Sweetshop's profit from the sale of x pounds of chocolate creams.
 b. What is the profit (or loss) on the sale of 200 pounds?
69. It costs an appliance manufacturer $300x + 200$ dollars per week to produce x top-loading washing machines, which will then bring in weekly revenues of $500x - 0.08x^2$ dollars.
 a. Write an expression for the weekly profit from producing x washing machines.
 b. What is the profit (or loss) from 60 washing machines?
70. A company can produce x lawn mowers per week for $120x + 80$ dollars. The sale of the lawn mowers will generate $200x - 0.3x^2$ dollars in weekly revenue.
 a. Write an expression for the weekly profit from producing x lawn mowers.
 b. What is the profit (or loss) from 200 lawn mowers?

■ For Problems 71–74 refer to the geometric formulas in the Review of Elementary Topics.*

71. a. Write a polynomial that gives the area of the speaker frame (the shaded region) pictured.
 b. If $x = 8$ inches, find the area of the frame. Use $\pi = 3.14$.



PROBLEM 71



PROBLEM 72

*The Review of Elementary Topics, which follows the preface, provides a reference for basic notions from elementary algebra and geometry.