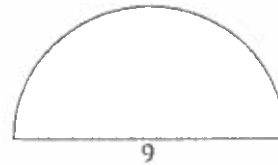
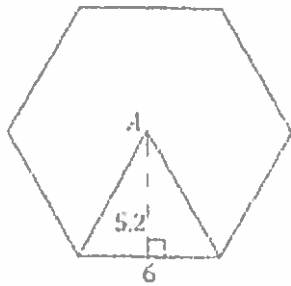
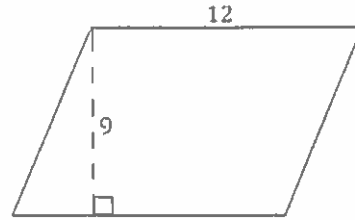
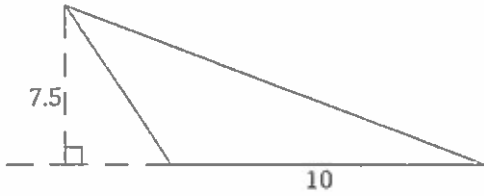


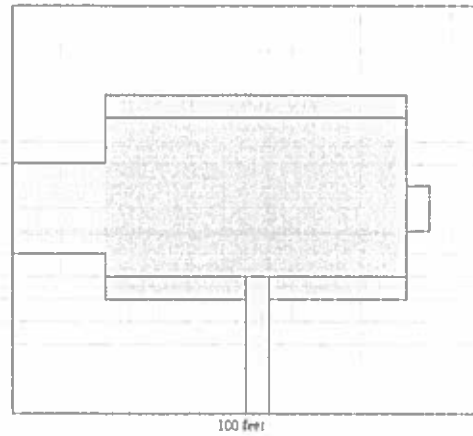
Find the area of each shape based on the provided measurements. Explain how you found each area.



Problem 1

A landscape company wants to plant lawn seed. A 20 lb. bag of lawn seed will cover up to 420 sq. ft. of grass and costs \$49.98

A scale drawing of a rectangular yard is given. The length of the longest side is 100 ft. The house, driveway, sidewalk, garden areas, and utility pad are shaded. The unshaded area has been prepared for planting grass. How many 20 lb. bags of lawn seed should be ordered, and what is the cost?



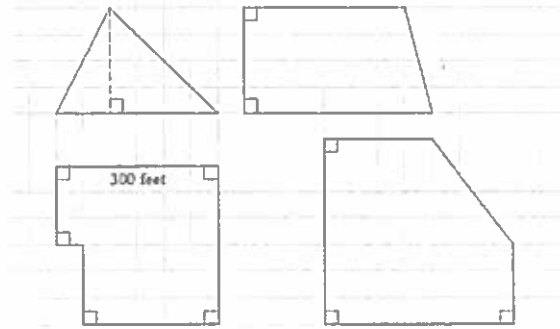
Problem 2

Ten dartboard targets are being painted as shown in the following figure. The radius of the smallest circle is 3 in. and each successive, larger circle is 3 in. more in radius than the circle before it. A "tester" can of red and of white paint is purchased to paint the target. Each 8 oz. can of paint covers 16 sq. ft. Is there enough paint of each color to create all ten targets?



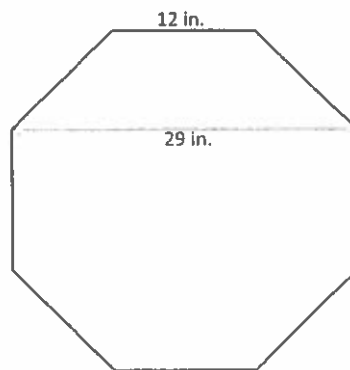
Problem Set

3. A farmer has four pieces of unfenced land as shown below in the scale drawing where the dimensions of one side are given. The farmer trades all of the land and \$10,000 for 8 acres of similar land that is fenced. If one acre is equal to $43,560 \text{ ft}^2$, how much per square foot for the extra land did the farmer pay rounded to the nearest cent?

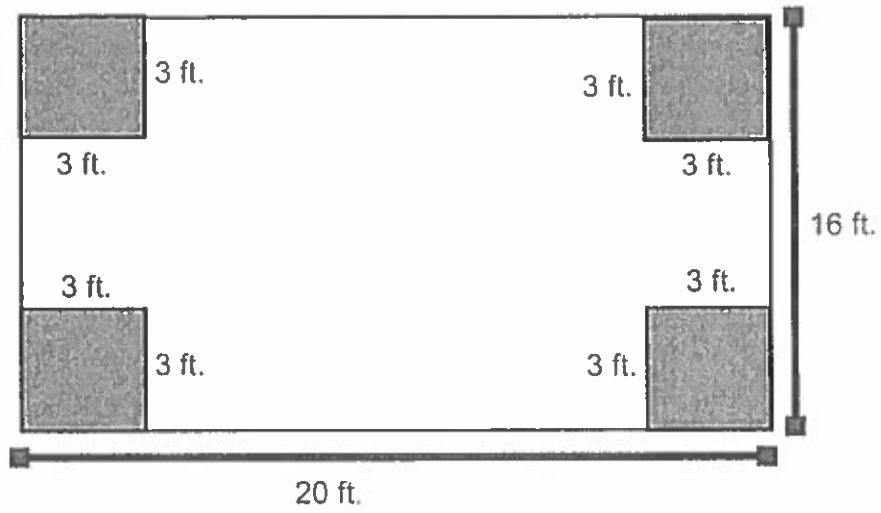


4. An ordinance was passed that required farmers to put a fence around their property. The least expensive fences cost \$10 for each foot. Did the farmer save money by moving the farm?

5. A stop sign is an octagon (i.e., a polygon with eight sides) with eight equal sides and eight equal angles. The dimensions of the octagon are given. One side of the stop sign is to be painted red. If Timmy has enough paint to paint 500 sq. ft. (72,000 sq. in.) can he paint 100 stop signs? Explain your answer.

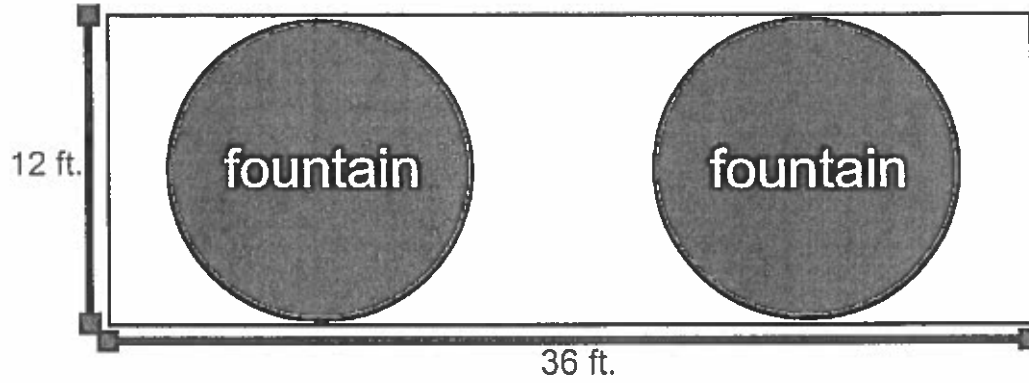


6. Mr. Fitzhugh is planning a concrete patio for his back yard. He wants to include flower beds in each corner. Below is a diagram of what he wants to make.



- A. How many square feet does he need to cover with concrete?
- B. If he puts a wire fence around each flower bed, how many feet of fence does he need?

7. P.S. is planning to build a fountain over part of their court yard. A diagram of what the landscaping is to look like is below.



- A. How many feet of fencing is needed to enclose the fountains?
- B. How much area do the two fountains take up?
- C. How many square feet of sod are needed to cover the indicated space?

8. The Smith family is renovating a few aspects of their home. The following diagram is of a new kitchen countertop. Approximately how many square feet of counter space is there?

