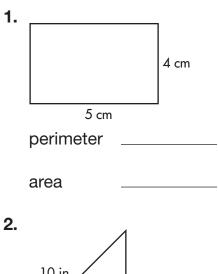
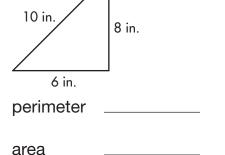
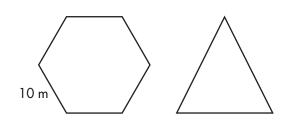
For questions **1–2**, find the perimeter and area of each figure



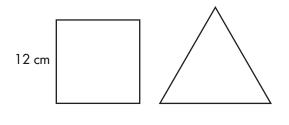


3. The hexagon and triangle below have the same perimeter. Each figure is made up of sides of equal measure. How long is each side of the triangle?



Draw a picture to solve this problem.

- 4. A rectangular backyard measures 15 meters by 20 meters. There is a square flower bed in the middle of the yard with sides of 3 meters. What is the area of the yard only?
- 5. The square and triangle below have the same perimeter. Each figure is made up of sides of equal measure. How long is each side of the triangle?



In **6–7**, draw a picture to solve each problem.

- 6. A sidewalk borders a rectangular play area. The play area measures 20 ft by 14 ft. The width of the sidewalk is 2 feet. What is the perimeter of the outside borders of the sidewalk?
- 7. A regular hexagon has a perimeter of 84 cm. What is the length of a side?

Topic **13** Free Response Test

- 8. A polygon has sides with lengths 6.3 mm, 8.2 mm, 7.5 mm, 4.9 mm, and 7.3 mm. What is the perimeter?
- **9.** What is the length of the line segment in inches?
- **10.** To the nearest mm, what is the length of the line segment?
- 11. Melba is putting a border along the walls of her bedroom. The room is 12 ft long and 8 ft wide. If one package of border is 36 in. long, how many packages should Melba buy?

Find the perimeter of these regular polygons.

12. A regular triangle with one side 6 inches long.

perimeter = _____

13. A regular pentagon with one side equal to 4 feet.

perimeter = _____

- A regular heptagon with one side equal to 9 centimeters
 perimeter = _____
- 15. Jake designed a flower bed shaped like a parallelogram. The flower bed is 25 inches long and 19 inches high. What is the area of Jakes flower bed?
- **16.** A triangular piece of land has a base of 12 yards and a height of 16 yards. What is the area of the piece of land?

esponse Test

[opic 13