Name _____ Date _____ Class _____

Use the diagram for problems 1 and 2.

radius = 25 ft
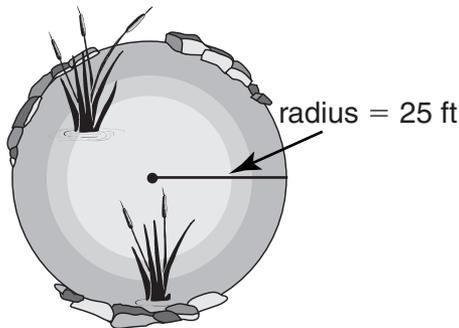
1. A pond is in the shape of a circle. What is the circumference of the pond in feet written in terms of π?

   A. $C = 2(25\pi)$

   B. $C = 2(50\pi)$

   C. $C = 25 \times 25 \times \pi$

   D. $C = 50 \times 50 \times \pi$

2. What is the area of the pond? (Use 3.14 for π.)

   F.   78.5 square feet

   G. 157 square feet

   H. 246.49 square feet

   I. 1,962.5 square feet

3. A bicycle tire has a diameter of 26 inches. About how far will the bicycle travel when the front wheel makes 300 revolutions? (Use 3.14 for π.)

   A. 159,198 inches

   B. 48,984 inches

   C. 24,492 inches

   D. 12,246 inches

4. A pizza has a diameter of 14 inches. What is the area of the pizza? (Use $\frac{22}{7}$ for π.)

   F.   44 square inches

   G. 88 square inches

   H. 154 square inches

   I. 616 square inches

5. A lawn sprinkler sprays water 9 feet as it rotates. Loren sets the sprinkler to cover $\frac{1}{3}$ of a circle.

9 ft

What is the area of the lawn that will be watered? (Use 3.14 for π.)

   A. 1,017.36 square feet

   B. 339.12 square feet

   C. 254.34 square feet
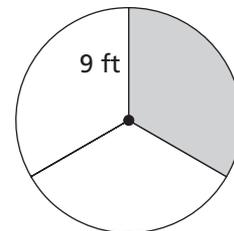
   D. 84.78 square feet

Holt McDougal Math

Focus on Sunshine State Standards: Benchmark Tests
GRADE 10 *MA.912.G.6.5 Benchmark Pre-Test (Gridded Response)*

Use the Gridded Response Answer Sheet.

Use the clock for problems 6 and 7.

6. A large clock at the top of a clocktower is being restored. The radius of the clock is 7 feet. The section of the circular steel rim from 12 to 3 must be replaced. How many feet of steel are in the length of the clock's rim from the numbers 12 to 3? (Use $\frac{22}{7}$ for π.)

7. A sector of the clock is formed by drawing radii fom the center of the clock to the outer edge of the frame through the numbers 5 and 8. What is the area of this sector? (Use $\frac{22}{7}$ for π.)

8. Roz is making a tablecloth for a round table that has a radius of 2 feet. She wants the tablecloth to extend 1 foot over the edge of the table all around, and will sew lace trimming around the edge. How many feet of lace trimming does she need to buy? (Use 3.14 for π.)

9. Theo baked a cake in a round pan with an 8-inch diameter. He cut the cake from the center to the edge of the pan into 8 equal pieces. What is the area of one piece of cake in square inches? (Use 3.14 for π.)

10. The shaded region shows a stone fountain with an inside diameter of 8 feet and an outside diameter of 10 feet.
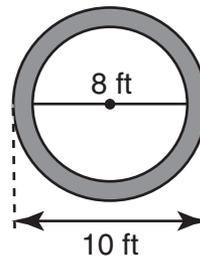
What is the area of the shaded region in square feet? (Use 3.14 for π.)

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