

NAME _____

For use with pages 759–765

Use the diagram at the right.

- **1**. Name a chord of the sphere.
- 2. Name a segment that is a radius of the sphere.
- **3**. Name a segment that is a diameter of the sphere.
- **4.** Find the circumference of the great circle that contains *A* and *B*.
- 5. Find the surface area of the sphere.
- 6. Find the volume of the sphere.



Find the surface area of the sphere. Round your result to two decimal places.



In Exercises 10–13, use the diagram at the right. The center of the sphere is *C* and its circumference is 9π inches.

- **10.** What is half of the sphere called?
- **11.** Find the radius of the sphere.
- **12.** Find the diameter of the sphere.
- **13.** Find the surface area of half the sphere.

Find the volume of the sphere. Round the result to two decimal places.





17. *Earth and Mercury* The mean radius of Earth is approximately 3963 miles. The mean radius of Mercury is 1509 miles. How does the surface area of Mercury compare to the surface area of Earth?



• C

