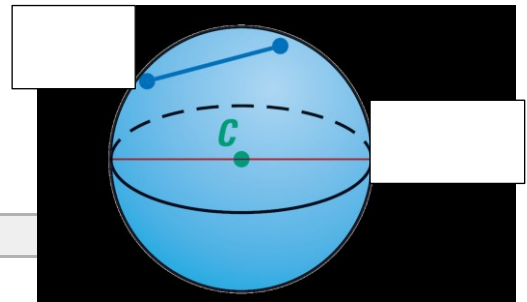
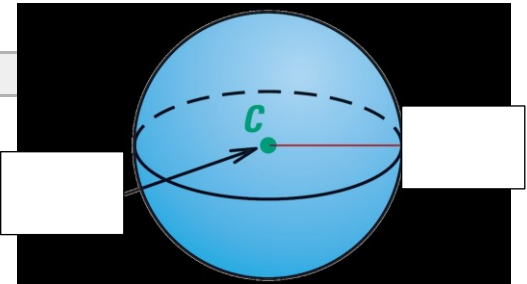


Geometry

12.6 Surface Area and Volume of Spheres (12.5)

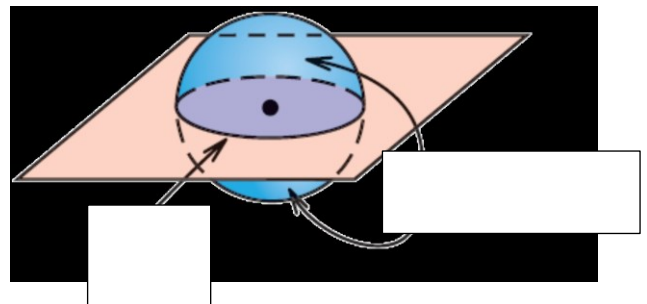
Parts of a Sphere

- **Sphere**
 - All points _____
- **Radius**
 - Segment from _____
- **Chord**
 - Segment that connects _____
- **Diameter**
 - Chord that contains _____
- **Tangent**
 - Line that intersects the sphere _____



Intersections of a Plane and a Sphere

- Point
 - _____
- Circle
 - _____
- Great Circle
 - _____
(like equator)
 - Shortest _____ two points on sphere
 - Cuts sphere into two _____



Surface Area of a Sphere

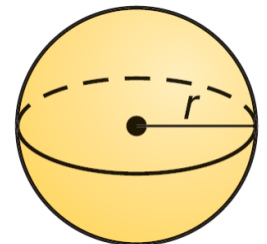
$$S = \underline{\hspace{2cm}}$$

Where r = radius

Volume of a Sphere

$$V = \underline{\hspace{2cm}}$$

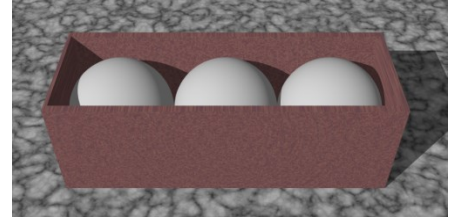
Where r = radius



Geometry 12.6

Name: _____

Find the volume of the empty space in a box containing three golf balls. The diameter of each is about 1.5 inches. The box is 4.5 inches by 1.5 inches by 1.5 inches.



Assignment: 652 #2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 43, 44, 45, 46, 48 = 20 total