

12-4: Area and Volume of Spheres

C.O.: _____

L.O.: _____

Spheres:

A sphere with _____ O and _____ r is the set of all points in a space at a distance ____ from point ____.

Many of the terms used with spheres are the same as those used with circles:

\overline{OA} , \overline{OB} , and \overline{OD} are _____.

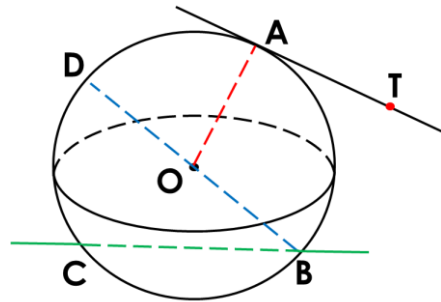
\overline{BD} is a _____.

\overline{BC} is a _____.

\overrightarrow{BC} is a _____.

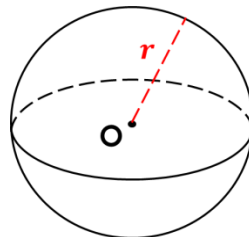
\overrightarrow{AT} is a _____.

\overline{AT} is a _____.



Theorem 12-9: The area of a sphere equals _____

Equation:

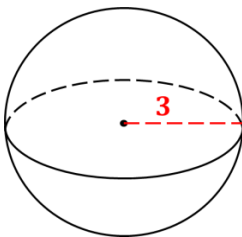


Theorem 12-10: The volume of a sphere equals _____

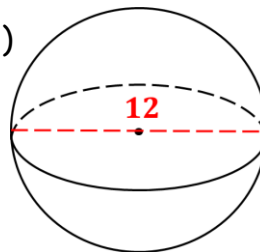
Equation:

Practice: Find the Area and Volume of the following Spheres.

1.)

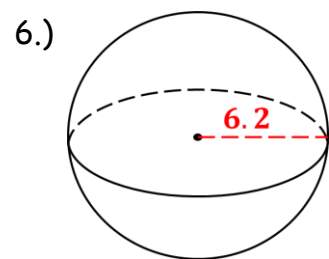
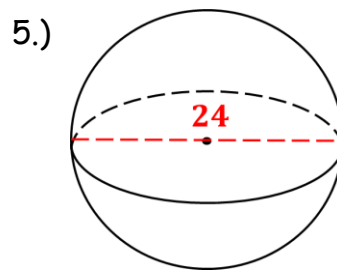
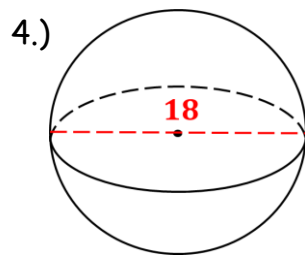
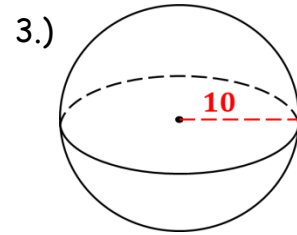
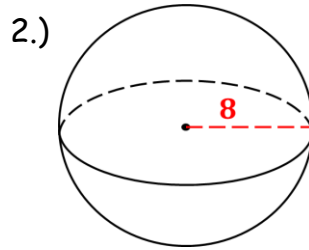
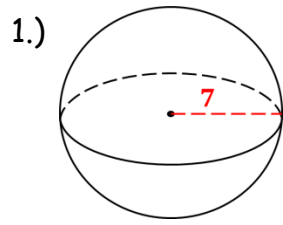


2.)



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Group Practice: Find the Area and Volume of the following Spheres in your groups.



7.) A sphere has diameter 15.6. Find the area and volume.

8.) A sphere has a volume of $\frac{1372\pi}{3}$. Find the radius and the area.

9.) A sphere has an area of 144π . Find the radius and volume.