A giant sphere has a diameter of 100 feet. Find its approximate volume. Use $\pi = 3.14$

A) 500,000 cu ft

B) 150,000 cu ft

C) 167,000 cu ft

D) 524,000 cu ft

Standard: 8.G.C.9
Domain: Geometry
Theme: Solve real-world and mathematical problems involving volume of cylinders, cones and spheres.
Description: Know the formulas for the volume of cones, cylinders, and spheres and use them to solve real-world and mathematical problems.
Which of the following describes the relationship between the volumes of a cone and cylinder with the same radius and the same height.

A) The volume of the cylinder is three times that of the cone.

B) The volume of the cylinder is \(\frac{1}{3}\) that of the cone.

C) The volume of the cylinder is \(\frac{4}{3}\) that of the cone.

D) None of the above.
Course: Lumos StepUp - SBAC Online Practice And Assessments - Grade 8 Mathematics

Lesson: Finding Volume- Cone, Cylinder, And Sphere

Standard(s): 8.G.C.9 (Practice Now)

<table>
<thead>
<tr>
<th>Find the volume of a cone whose radius is 0.5 cm with a height of 8 cm.</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ \pi ]</td>
</tr>
<tr>
<td>A) ( \frac{1}{3} ) cu cm  [ \pi ]</td>
</tr>
<tr>
<td>B) ( \frac{2}{3} ) cu cm  [ \pi ]</td>
</tr>
<tr>
<td>C) ( \frac{4}{3} ) cu cm  [ \pi ]</td>
</tr>
<tr>
<td>D) ( 4 ) cu cm</td>
</tr>
</tbody>
</table>

Standard: 8.G.C.9
Domain: Geometry
Theme: Solve real-world and mathematical problems involving volume of cylinders, cones and spheres.
Description: Know the formulas for the volume of cones, cylinders, and spheres and use them to solve real-world and mathematical problems.
Find the volume of a cone with a radius of 0.5 cm and a height of 4 cm.

A) \(\frac{4}{3}\) cu cm

B) \(\frac{2}{3}\) cu cm

C) \(4\) cu cm

D) \(3\) cu cm

Standard: 8.G.C.9
Domain: Geometry
Theme: Solve real-world and mathematical problems involving volume of cylinders, cones and spheres.
Description: Know the formulas for the volume of cones, cylinders, and spheres and use them to solve real-world and mathematical problems.
If a sphere and a cone have the same radius \( r \) and the cone has a height of 4, find the ratio of the volume of the sphere to the volume of the cone.

A) \( r : 1 \)

B) \( 1 : r \)

C) \( r : 4 \)

D) \( 4 : r \)