

12 Chapter 12 Quiz 3

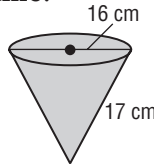
SCORE _____

(Lessons 12-5 and 12-6)

1. A pyramid has a height of 18 centimeters and a base with an area of 26 square centimeters. Find the volume.

1. 156 cm³

2. Find the volume of the cone. Round to the nearest tenth.



2. 1005.3 cm³

3. A hemisphere has a base with an area that is 25π square centimeters. Find the volume of the hemisphere. Round to the nearest tenth.

3. 261.8 cm³

4. A sphere has a great circle with a circumference of 8π meters. What is the surface area of the sphere?

4. 64π m²

5. **MULTIPLE CHOICE** A sphere has a radius that is 15.6 inches long. Find the volume of the sphere. Round to the nearest tenth.

- A 1019.4 in³
- B 7951.2 in³

- C 15,902 in³
- D 47,702.2 in³

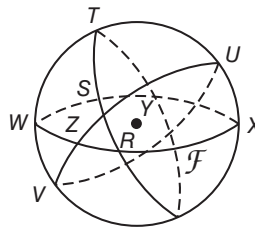
5. C

12 Chapter 12 Quiz 4

SCORE _____

(Lessons 12-7 and 12-8)

1. Name two lines containing point Z , a segment containing point R , and a triangle in the sphere \mathcal{F} .

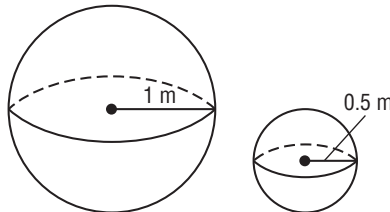


1. \overleftrightarrow{WX} and \overleftrightarrow{VU} , \overline{ZX} , and $\triangle RSZ$

2. Do all lines have an infinite number of points in spherical geometry? If not, explain your reasoning.

2. yes

3. Determine whether the pair of solids is *similar*, *congruent*, or *neither*. If the solids are similar, state the scale factor.



3. similar, 2:1

4. Two similar prisms have heights of 12 feet and 20 feet. What is the ratio of the volume of the small prism to the volume of the large prism?

4. 27:125

5. Two cubes have surface areas of 81 square inches and 144 square inches. What is the ratio of the volume of the small cube to the volume of the large cube?

5. 27:64