Volume Quiz

1.) What is the radius of a cylinder with a diameter of 28 in.?

A. 14 in.   C. 46 in.
B. 18 in.   D. 56 in.

2.) What is the radius of a cone with a diameter of 58 cm?

A. 24 cm   C. 116 cm
B. 29 cm   D. 124 cm

3.) What is the radius of a sphere with a diameter of 21 mm?

A. 10.5 mm   C. 41 mm
B. 12.5 mm   D. 42 mm

4.) What is the radius of a cylinder with a diameter of 9 in.?

A. 3 in.   C. 4.5 in.
B. 4.3 in.   D. 18 in.

5.) What is the radius of a cone with a diameter of 15 ft?

A. 5 ft   C. 30 ft
B. 7.5 ft   D. 45 ft

6.) What is the diameter of a cylinder with a radius of 8 cm?

A. 2 cm   C. 12 cm
B. 4 cm   D. 16 cm

7.) What is the diameter of a cone with a radius of 24 in.?

A. 12 in.   C. 52 in.
B. 48 in.   D. 72 in.

8.) What is the diameter of a sphere with a radius of 3.5 ft?

A. 1.75 ft   C. 7 ft
B. 6 ft   D. 8.25 ft

9.) What is the diameter of a cone with a radius of 15.2 cm?

A. 7.1 cm   C. 30.1 cm
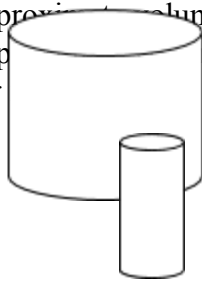B. 7.6 cm   D. 30.4 cm

10.) What is the diameter of a sphere with a radius of 58.7 mm?

A. 29.35 mm   C. 106.14 mm
B. 34.35 mm   D. 117.4 mm

*Round each of the following answers to the nearest tenth, if necessary.

11.) What is the approximate volume of this cylinder? (Use 3.14 for п.)
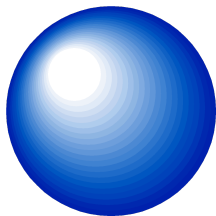12.) What is the approximate volume of this
cylinder? (Use 3.14 for

A. 47.1 cm³ C. 141.3 cm³
B. 94.2 cm³ D. 207.1 cm³
A. 18.8 in³   C. 37.7 in³
B. 21.98 in³ D. 75.2 in³

13.) A can of soup has a height of 10 cm and a diameter of 6cm. What is the volume of the can of soup? (Write answer in terms of п.)
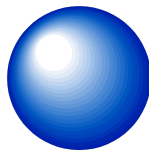
A. 40п cm³   C. 120п cm³
B. 90п cm³   D. 160п cm³

14.) What is the approximate volume of this sphere? (Use 3.14 for п.)

A. 37.7 m³   C.226 m³
B. 113 m³   D. 254.3 m³

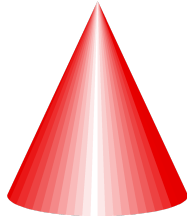15.) What is the approximate volume of this sphere? (Write answer in terms of п.)

A. 56.5п ft³   C. 288п ft³
B. 113п ft³   D. 2304п ft³

16.) A sporting good store sells kickballs that have a radius of 5 in., what is the volume of each kickball? (Write answer in terms of п.)

A. 166.7п in.³

C. 833.3п in.³

B. 333.3п in.³

D. 1240п in.³

17.) What is the approximate volume of this cone? (Use 3.14 for π.)

A. 12.6 cm³   C. 50.2 cm³
B. 25.1 cm³   D. 113 cm³

18.) What is the approximate volume of this cone? (Write answer in terms of π.)
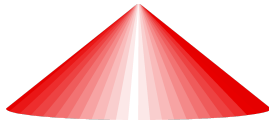
A. 60π in.³   C. 240π in.³
B. 120π in.³   D. 360π in.³

19.) When decorating a cake, the frosting is put into a cone shaped bag and then squeezed out of a hole at the tip of the cone. How much frosting is in a bag that has a diameter of 10 cm and a height of 15 cm? (Write answer in terms of π.)

A. 25π cm³

C. 90π cm³

B. 50π cm³

D. 125π cm³

20.) The volume of a cylinder is 62.8 cm³. If the radius is 2 cm, what is the height of the cylinder?

A. 2.5 cm

C. 10 cm

B. 5 cm

D. 15 cm