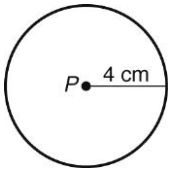
Name _____ Date _____ Class _____

Circles and Volume

Circle the best answer.

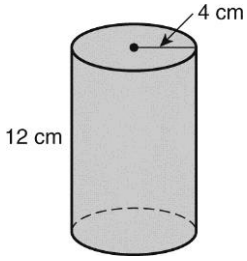
1. What is the circumference of $\odot P$ in terms of π?



A 4π cm C 16π cm

B 8π cm D 64π cm

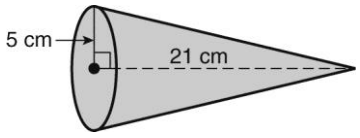
2. What is the volume of the right cylinder?



F 48π cm^3 H 768π cm^3

G 192π cm^3 J 1536π cm^3

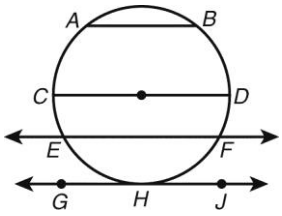
3. What is the volume of the cone?



A 70π cm^3 C 175π cm^3

B 105π cm^3 D 525π cm^3

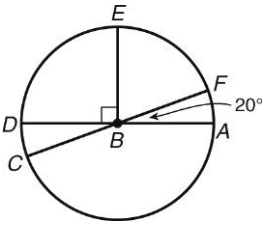
4. Which describes $\overleftrightarrow{EF}$?



F chord H secant

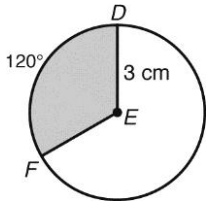
G radius J tangent

5. What is mEA?



A 70° B 90°

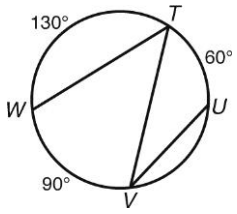
6. What is the area of sector DEF in terms of π?



F $\frac{\pi}{3}$ cm^2 H 2π cm^2

G π cm^2 J 3π cm^2

7. What is m$\angle WTV$?



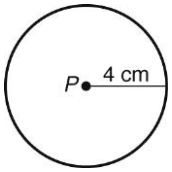
A 30° C 60°

B 45° D 90°

Name _____ Date _____ Class _____

Circles and Volume

8. Find the area of $\odot P$ in terms of π.



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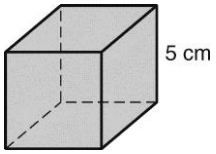
9. Find the volume of the cube.



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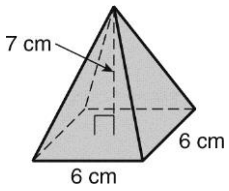
10. Find the volume of the pyramid.



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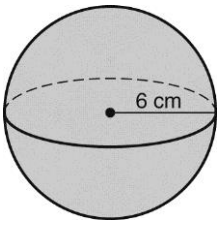
Use the figure for Exercises 11 and 12.



11. Find the volume of the sphere in terms of π.

_____

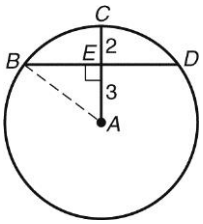
12. Find the surface area of the sphere in terms of π.

_____

13. Find the measure of the major arc if its central angle is 35°.

_____

14. Find *DB*.



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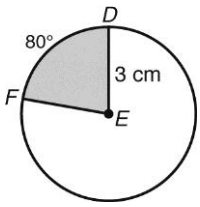
15. Find the area of sector *DEF*. Give your answer in terms of π.

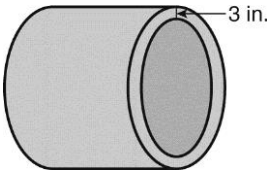


Name _____ Date _____ Class _____

Circles and Volume

Circle the best answer.

1. What is the radius of the inside of the sewer pipe if the circumference of the outside of the pipe is 12.56 feet?



A 1 ft 6 in. C 2 ft

B 1.75 ft D 4 ft

2. You have 4500 cubic centimeters of wax. How many cylindrical candles can you make from the wax if each candle is 15 centimeters tall and has a diameter of 10 centimeters?

F 0 H 3.8

G 3 J 4

3. A cone has a volume of about 28 cubic inches. Which are possible dimensions for the cone?

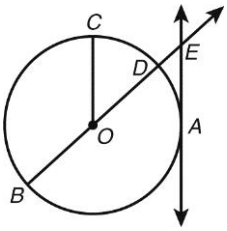
A radius 6 inches, height 3 inches

B diameter 6 inches, height 3 inches

C diameter 4 inches, height 6 inches

D diameter 6 inches, height 6 inches

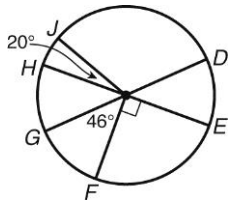
4. Which is a chord?



F $\overline{AE}$ H $\overline{BD}$

G $\overleftrightarrow{BE}$ J $\overline{OC}$

5. Which of these arcs has a measure of 134°?



A *FJ* C *EG*

B *DF* D *DH*

6. Which sector does NOT have an area of 3π?

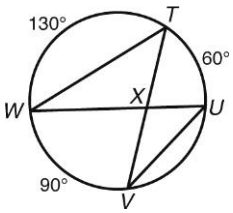
F central angle 135°; radius $2\sqrt{2}$

G central angle 80°; radius 3

H central angle 67.5°; radius 4

J central angle 270°; diameter 4

7. What is m$\angle VXU$?



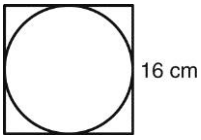
A 30° C 65°

B 45° D 105°

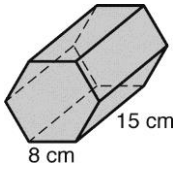
Name _____ Date _____ Class _____

Circles and Volume

8. Given that the circle is inscribed in the square, find the area of the circle to the nearest hundredth.



9. Find the volume of the regular hexagonal prism. If necessary, round to the nearest tenth.

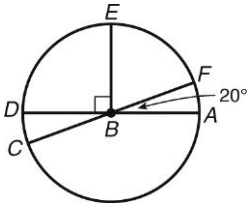


10. Find the volume of a rectangular pyramid with length 5 meters, width 3.4 meters, and height 8 meters. Round to the nearest tenth.

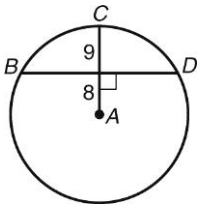
11. Determine the volume of a sphere with a great circle that has an area of 9π cm^2. Give the answer in terms of π.

12. Determine the surface area of a sphere if the diameter is 3 feet. Round to the nearest tenth.

13. Find m*CDE*.



14. Find *BD*.



15. Find the area of sector *DEF*. Give your answer in terms of π and rounded to the nearest hundredth.