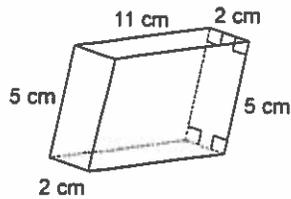


Unit 3 Review Volume, Pythagorean Thm, Distance NWNC

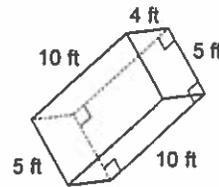
Find the volume of each figure. Round your answers to the nearest hundredth, if necessary.

1)



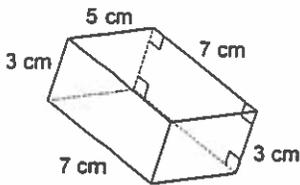
- A) 110 cm^3 B) 84 cm^3
 C) 129 cm^3 D) 114 cm^3

2)



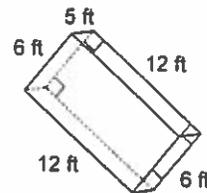
- A) 200 ft^3 B) 202 ft^3
 C) 193 ft^3 D) 130 ft^3

3)



- A) 120 cm^3 B) 105 cm^3
 C) 108 cm^3 D) 53 cm^3

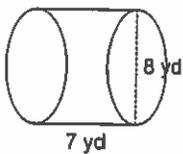
4)



- A) 523 ft^3 B) 360 ft^3
 C) 423 ft^3 D) 333 ft^3

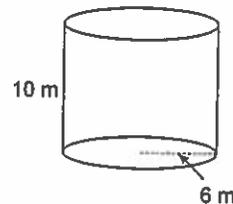
Find the volume of each figure. Round your answers to the nearest tenth, if necessary.

5)



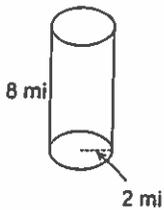
- A) 1407.4 yd^3 B) 507.9 yd^3
 C) 523 yd^3 D) 351.9 yd^3

6)



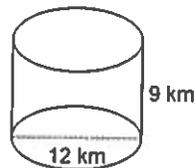
- A) 1461.4 m^3 B) 839.5 m^3
 C) 1131 m^3 D) 125.7 m^3

7)



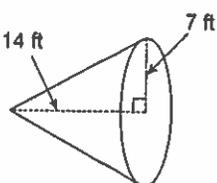
- A) 100.5 mi^3 B) 97.7 mi^3
 C) 143.1 mi^3 D) 135.3 mi^3

8)



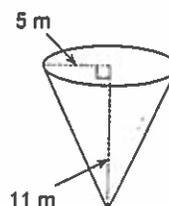
- A) 4071.5 km^3 B) 1017.9 km^3
 C) 934.6 km^3 D) 903.7 km^3

9)



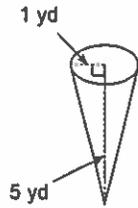
- A) 718.4 ft^3 B) 769.1 ft^3
 C) 837.5 ft^3 D) 627.5 ft^3

10)



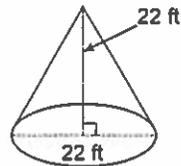
- A) 327.3 m^3 B) 323.4 m^3
 C) 288 m^3 D) 298.2 m^3

11)



- A) 5.2 yd^3 B) 16.7 yd^3
 C) 12.5 yd^3 D) 3.2 yd^3

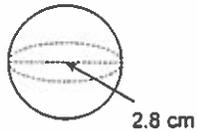
12)



- A) 2787.6 ft^3 B) 3602.3 ft^3
 C) 4009.9 ft^3 D) 11150.6 ft^3

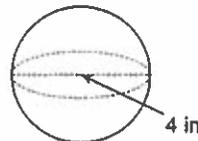
Find the volume of each figure. Round your answers to the nearest hundredth, if necessary.

13)



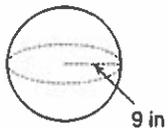
- A) 91.95 cm^3 B) 13.92 cm^3
 C) 8.9 cm^3 D) 11.49 cm^3

14)



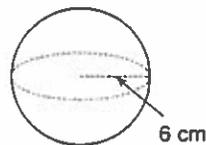
- A) 26.58 in^3 B) 33.51 in^3
 C) 44.53 in^3 D) 268.08 in^3

15)



- A) 3488.28 in^3 B) 3127.82 in^3
 C) 1630.26 in^3 D) 3053.63 in^3

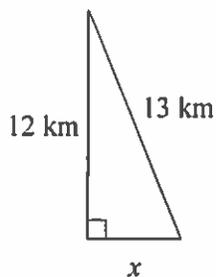
16)



- A) 1196.33 cm^3 B) 773.9 cm^3
 C) 904.78 cm^3 D) 726.71 cm^3

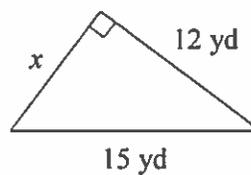
Find the missing side of each triangle. Round your answers to the nearest tenth if necessary.

17)



- A) 14 km B) 18 km
 C) 10.9 km D) 5 km

18)



- A) 19 yd B) 7.9 yd
 C) 9 yd D) 17 yd

State if the three sides lengths form a right triangle.

19) 9 m, 11 m, 15 m

- A) No B) Yes

20) 6 ft, 8 ft, 10 ft

- A) Yes B) No

Find the distance between each pair of points. Round your answer to the nearest tenth, if necessary.

21) $(-1, 4)$, $(-1, 0)$

- A) 2 B) 4
 C) 3.5 D) 2.4

22) $(2, -2)$, $(-1, -1)$

- A) 5.1 B) 2.8
 C) 3.2 D) 2

23) $(-4, 0), (-2, -3)$

- A) 2.2 B) 3.6
C) 6.7 D) 4.1

24) $(0, 3), (-2, 3)$

- A) 1.4 B) 2.8
C) 6.3 D) 2

Solve each equation.

25) $18 = n + 8 + 2$

- A) $\{8\}$ B) $\{-7\}$
C) $\{-3\}$ D) $\{9\}$

26) $4m - 8m = 0$

- A) $\{2\}$ B) $\{12\}$
C) $\{0\}$ D) $\{11\}$

27) $6(-4x + 7) = 186$

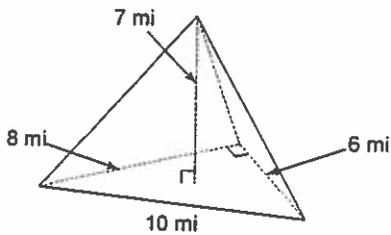
- A) $\{3\}$ B) $\{-6\}$
C) $\{7\}$ D) No solution.

28) $-203 = -4(-8p + 2) - 3$

- A) $\{6\}$ B) $\{-15\}$
C) $\{14\}$ D) $\{-6\}$

Find the volume of each figure. Round your answers to the nearest hundredth, if necessary.

29)



MATHEMATICS

Formulas

Below are formulas you may find useful as you work the problems. However, some of the formulas may not be used. You may refer to this page as you take the test.

Circumference

$$C = \pi d \text{ or } C = 2\pi r \quad \pi = 3.14$$

Area

Rectangle $A = bh$ or $A = lw$

Triangle $A = \frac{1}{2}bh$

Circle $A = \pi r^2$

Pythagorean Theorem

$$a^2 + b^2 = c^2$$

Mean

$$\bar{x} = \frac{x_1 + x_2 + x_3 + \dots + x_n}{n}$$

Mean Absolute Deviation

$$\frac{\text{Total Distance (of all values from the mean value)}}{\text{Number of values}}$$

Interquartile Range: the difference between the first quartile and third quartile of a set of data

Volume

Rectangular Prism Volume = (area of base) \times (height) or $V = lwh$

Cylinder Volume = (area of base) \times (height)

Sphere $V = \frac{4}{3}\pi r^3$

Cone $V = \frac{1}{3}Bh$