MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

Find area of figure.

1) Find the area of a rectangle measuring 3.6 yd by 23.71 yd.
   A) 85.356 yd$^2$  B) 27.31 yd$^2$  C) 12.96 yd$^2$  D) 170.712 yd$^2$

2) Find the area of a square measuring 97 km on a side.
   A) 9409 km$^2$  B) 388 km$^2$  C) 194 km$^2$  D) 18,818 km$^2$

3) \[
\begin{array}{c}
\text{28 ft} \\
\text{22 ft} \\
\text{34 ft}
\end{array}
\]
   A) 374 ft$^2$  B) 242 ft$^2$  C) 308 ft$^2$  D) 748 ft$^2$

4) \[
\begin{array}{c}
\text{17 m} \\
\text{8 m} \\
\text{12 m}
\end{array}
\]
   A) 196 m$^2$  B) 232 m$^2$  C) 816 m$^2$  D) 116 m$^2$

Find area of circle. (Use 3.14 for $\pi$)

5) Find the area. Use 3.14 for $\pi$.
   \[
   \begin{array}{c}
   \text{15 ft}
   \end{array}
   \]
   A) 94.2 ft$^2$  B) 176.625 ft$^2$  C) 706.5 ft$^2$  D) 47.1 ft$^2$

6) A circle whose radius is 6 ft
   A) 452.16 ft$^2$  B) 37.68 ft$^2$  C) 18.84 ft$^2$  D) 113.04 ft$^2$
Find area of figure.

7)  
\[ \text{All segments are of equal length} \]
\[ A) 100 \text{ cm}^2 \quad B) 75 \text{ cm}^2 \quad C) 125 \text{ cm}^2 \quad D) 60 \text{ cm}^2 \]

8)  
\[ \begin{array}{c}
22 \\
8 \\
\end{array} \quad \begin{array}{c}
16 \\
11 \text{ ft} \\
\end{array} \]
\[ A) 319 \text{ ft}^2 \quad B) 231 \text{ ft}^2 \quad C) 264 \text{ ft}^2 \quad D) 274 \text{ ft}^2 \]

9)  
\[ (\text{Use } 3.14 \text{ for } \pi.) \]
\[ \begin{array}{c}
21.0 \text{ yd} \\
42.0 \text{ yd} \\
\end{array} \]
\[ A) 1055.0925 \text{ yd}^2 \quad B) 947.94 \text{ yd}^2 \quad C) 1228.185 \text{ yd}^2 \quad D) \text{Not enough data} \]

Find the shaded area.

10)  
\[ \begin{array}{c}
\text{8 cm} \\
\end{array} \]
\[ (\text{Use } 3.14 \text{ for } \pi.) \]
\[ A) 64 \text{ cm}^2 \quad B) 13.76 \text{ cm}^2 \quad C) 16 \text{ cm}^2 \quad D) 50.24 \text{ cm}^2 \]

Solve area problem.

11) A photograph measuring 6 in. by 8\( \frac{1}{2} \) in. is put in a frame measuring 6\( \frac{1}{2} \) in. by 9 in. What is the area of the border around the photo?  
\[ A) 7 \text{ in.}^2 \quad B) 8 \text{ in.}^2 \quad C) 7\frac{1}{2} \text{ in.}^2 \quad D) 6\frac{1}{2} \text{ in.}^2 \]

12) A yard in the shape of a square measures 18 ft on each side. A triangular area with a height of 4 ft and a base of 9 ft is dug up for a flower bed. How much yard area is left over?  
\[ A) 144 \text{ ft}^2 \quad B) 342 \text{ ft}^2 \quad C) 306 \text{ ft}^2 \quad D) 288 \text{ ft}^2 \]
Find the volume.

13) A) 133 ft$^3$  
    B) $66\frac{1}{2}$ ft$^3$  
    C) $18\frac{5}{6}$ ft$^3$  
    D) $120\frac{1}{6}$ ft$^3$

14) Of a cube measuring 3 ft on each edge
    A) 9 ft$^3$  
    B) 9 ft$^3$  
    C) 27 ft$^3$  
    D) 18 ft$^3$

Find the volume of the sphere or the cylinder.

15) A cylindrical drain pipe is 6 in. across the top and about 10 in. high. How many cubic inches of water could it hold?
    A) 1130.4 in.$^3$  
    B) 376.8 in.$^2$  
    C) 565.2 in.$^3$  
    D) 282.6 in.$^3$

16) A sphere with radius 2 m. Use 3.14 for $\pi$.
    A) 18.84 m$^3$  
    B) 33.493 m$^3$  
    C) 16.747 m$^3$  
    D) 267.947 m$^3$

17) A sphere has a 3 cm diameter. What is its volume?
    A) 113.0 cm$^3$  
    B) 14.1 cm$^3$  
    C) 7.9 cm$^3$  
    D) 9.4 cm$^3$

Find the volume of the composite figure.

18) Cylinder with Spherical Dome
    A) 636.37 cm$^3$  
    B) 117.23 cm$^3$  
    C) 435.41 cm$^3$  
    D) - 50.24 cm$^3$

Solve the problem. Use 3.14 as the approximate value of $\pi$. Round to the nearest tenth unless instructed otherwise.

19) A cylindrical jelly jar is 5 in. across the top and about 11 in. high. How many cubic inches of jelly could it hold?
    A) 863.5 in.$^3$  
    B) 431.8 in.$^3$  
    C) 345.4 in.$^3$  
    D) 215.9 in.$^3$