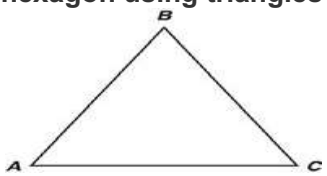
ELM_7th_Unit5_Pre

Class Set- Please Do Not Write on Test!

1. **Billy is constructing a hexagon using triangles congruent to Triangle *ABC*.**



How many triangles does Billy need to construct this hexagon?

A. Three B. Four C. Five D. Six

2. **Which of the following triangles CANNOT be drawn?**

A. Scalene right triangle
B. Acute isosceles triangle
C. Equilateral right triangle
D. Obtuse isosceles triangle

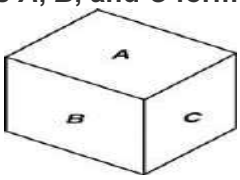
3. **Jessica is using popsicle sticks of different lengths to make geometric figures. She has one stick that is 4 centimeters long. Which combination of popsicle stick lengths could fit together with the 4-centimeter stick to make a triangle?**

A. 1 centimeter, 2 centimeters
B. 1 centimeter, 3 centimeters
C. 1 centimeter, 4 centimeters
D. 2 centimeters, 2 centimeters

4. **Zachary folded a piece of paper at the upper corner to form a 70° angle. Which tool should Zachary use to determine the size of the angle on the fold he made?**

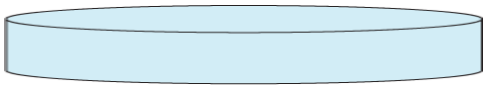
A. balance B. gauge C. protractor D. ruler

5. **In the figure, what do Planes *A*, *B*, and *C* form at their intersection?**



A. a line B. a point C. a plane D. a square

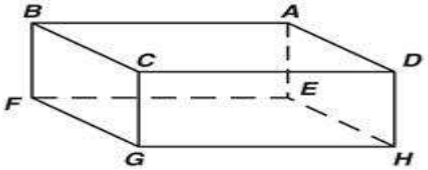
6. **A cylinder is shown.**



Which figure could result from slicing the cylinder?

A. Circle B. Triangle C. Hexagon D. Octagon

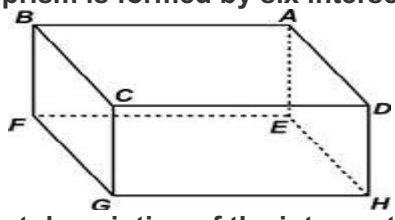
7. **The rectangular prism shown below is formed by six intersecting planes.**



Which of the following best describes the intersection of planes *CDHG* and *ADHE*?

A. Point *D*
B. Point H
C. the line containing $\overline{CD}$
D. the line containing $\overline{DH}$

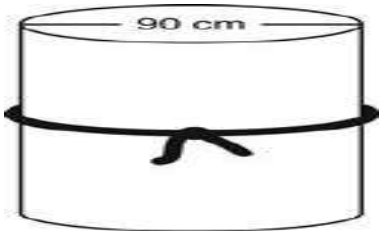
8. **A rectangular prism is formed by six intersecting planes.**



What is the best description of the intersection of Planes *CDHG* and *ABCD*?

A. Point *C*
B. Point D
C. the line containing $\overline{CG}$
D. the line containing $\overline{CD}$

9. **A rope wraps around the barrel as shown. Approximately 20 additional centimeters of the rope are used to tie the knot.**



What is the approximate total length of the rope in centimeters?

A. 161 B. 220 C. 303 D. 6378

10. **Janet has a circular flower bed. The diameter of the flower bed is 6 feet. Which expression can be used to find the area in square feet of the flower bed?**

A. $2 \times \pi \times 3 \times 3$ B. $\pi \times 3 \times 3$ C. $\pi \times 6 \times 6$ D. $\pi \times 6$

11. **Which statement best describes the relationship between the circumference and the diameter of a circle?**

A. The circumference is about 6 times the diameter.

B. The circumference is about 3 times the diameter.

C. The diameter is equal to the circumference.

D. The diameter is 2 times the circumference.

12. **A circle has circumference *C* and diameter *d*. Which expression is equivalent to π?**

A. $C \times d$ B. $C \div d$ C. $d \div C$ D. $d - C$

13. **Which term describes the relationship** between $\angle A$ and $\angle B$ **if the** $m\angle A = 84°$ **and** $m\angle B = 96°$?

A. vertical B. adjacent C. supplementary D. complementary

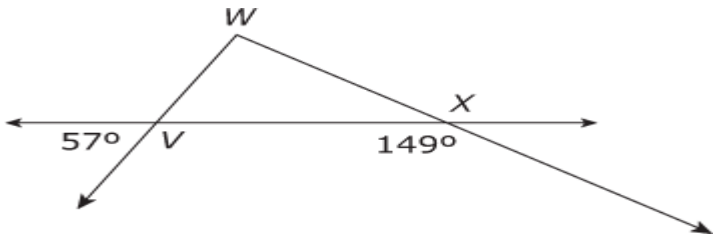
14. **What is the supplement of the complement of *x*° if** $0 < x < 90$**?**

A. $(x - 90)°$ B. $(x + 90)°$ C. $(90 - x)°$ D. $(180 - x)°$

15. **What is the supplement of an angle that measures 10°?**

A. 190° B. 170° C. 100° D. 80°

16. **Angle measures are shown in the figure.**



What is the difference in the measures of angle *WVX* and angle *WXV*?

A. 26° B. 31° C. 33° D. 57°

17. **A rectangular swimming pool has a length of 30 feet and a width of 12 feet. The pool is filled to a depth of 4 feet with water. What is the volume, in cubic feet, of the water in the swimming pool?**

A. 168 B. 360 C. 1056 D. 1440

18. **The dimensions of a rectangular room are *x* feet by *y* feet. A rug is placed on the floor 1 foot from each wall of the room. What is the area of the rug, in square feet?**

A. xy B. $xy - 4$ C. $(x - 1)(y - 1)$ D. $(x - 2)(y - 2)$

19. **The area of the doubles tennis court at a sports club is 261 square meters. What is this area in square centimeters?**

A. 0.000261 B. 0.0261 C. 26,100 D. 2,610,000

20. **Joe plans to install a concrete driveway in front of his house. Which of these measurements best describes the volume of concrete in one truck load?**

A. 8 cubic feet

B. 8 cubic yards

C. 8 cubic kilometers

D. 8 cubic centimeters