Name: _____   **Date:** _____
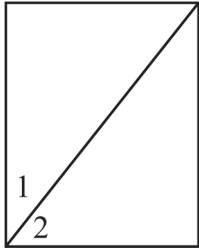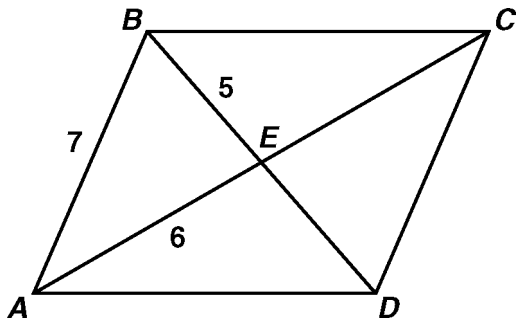
1. The picture below shows the rectangular wall hanging that Kim made out of wood.

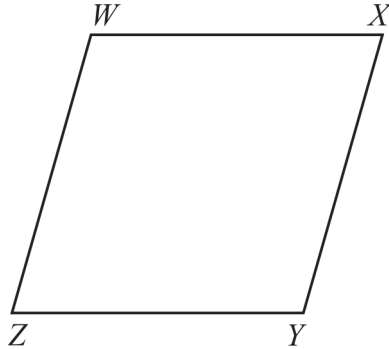   Angle 1 is 35°. Which statement about angles 1 and 2 is true?

    A.   They are supplementary angles.

    B.   They are congruent angles.

    C.   They are complementary angles.

    D.   They are right angles.

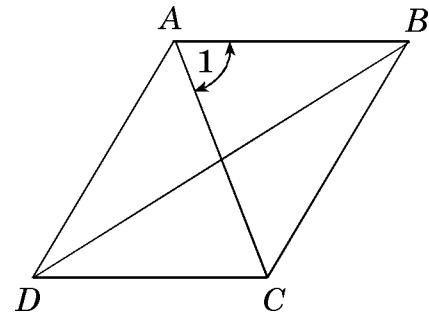2. If *ABCD* is a parallelogram, what is the length of segment *BD*?

    A. 10   B. 11   C. 12   D. 14

3. Quadrilateral *WXYZ* is a rhombus, but it is *not* a square.
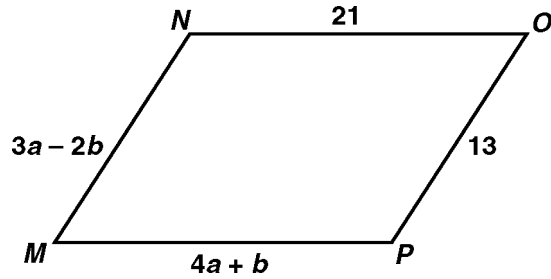

    Which of these statements is not true?

    A. $\overline{WY}$ is congruent to $\overline{XZ}$.

    B. $\angle X$ is congruent to $\angle Z$.

    C. $\overline{WX}$ is parallel to $\overline{YZ}$.

    D. $\overline{WY}$ is perpendicular to $\overline{XZ}$.

4. If *ABCD* is a rhombus and $m\angle ABC = 80$, what is the measure of $\angle 1$?
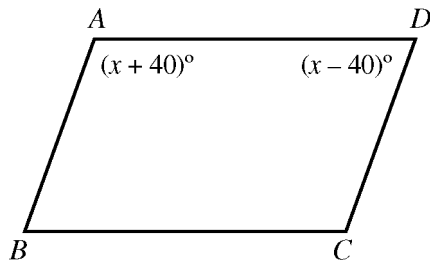

    A. 40   B. 50   C. 80   D. 90

5. What values of a and b make quadrilateral *MNOP* a parallelogram?

A. $a = 1, b = 5$

B. $a = 5, b = 1$

C. $a = \frac{11}{7}, b = \frac{34}{7}$

D. $a = \frac{34}{7}, b = \frac{11}{7}$

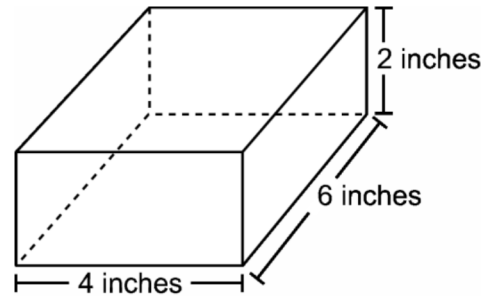6. In the figure below, $\overline{AB} \parallel \overline{CD}$.

What is the value of x?

A. 40   B. 50   C. 80   D. 90

7. *ABCD* is a parallelogram. If $m\angle BCD = (6x - 20)$ and $m\angle DAB = (2x + 80)$, what is the value of x?
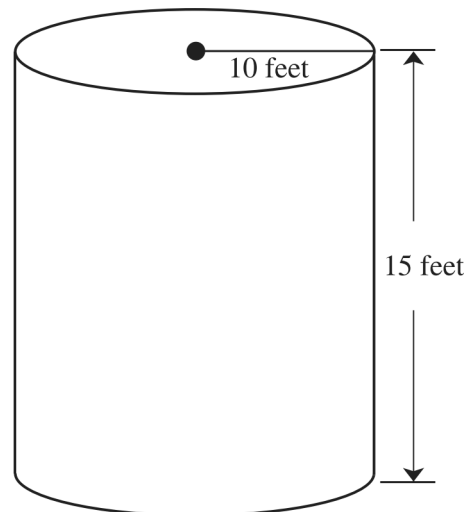
A. 8.3   B. 12.5   C. 15   D. 25

8. The diagram below shows a rectangular prism and its dimensions.

What is the surface area of the rectangular prism?

A. 40 square inches   B. 48 square inches

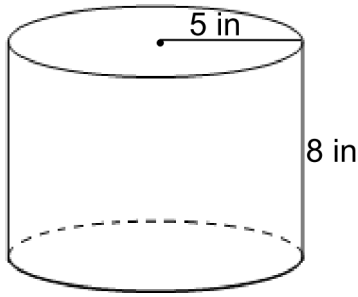C. 64 square inches   D. 88 square inches

9. Winona has to paint the entire surface of the barrel shown below.

What is the surface area of the barrel including the top and bottom? (Use 3.14 for π.)

A. 1,099 square feet   B. 1,256 square feet

C. 1,570 square feet   D. 2,198 square feet

10. Look at the cylinder.

What is the total surface area?

A. $65\pi\,\text{in}^2$ B. $90\pi\,\text{in}^2$

C. $105\pi\,\text{in}^2$ D. $130\pi\,\text{in}^2$

11. A cone has a radius of 12 cm and a height of 9 cm. What is the *approximate* lateral surface area of the cone? (To calculate the lateral surface area, A, use the formula $A = \pi r l$, where r is the radius and l is the slant height.)
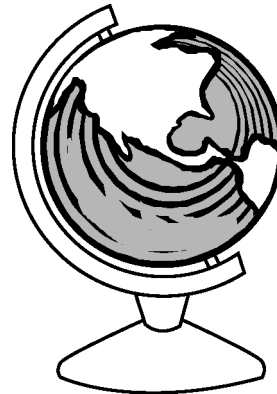
A. $89\,\text{cm}^2$ B. $123\,\text{cm}^2$

C. $424\,\text{cm}^2$ D. $565\,\text{cm}^2$

12. Use the pyramid to answer the question.
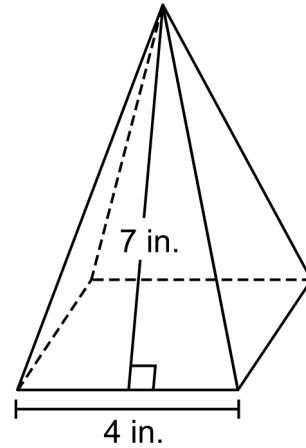
This right square pyramid has a base length of 4 inches and a slant height of 7 inches. What is the surface area of the pyramid?

A. 28 square inches   B. 44 square inches

C. 56 square inches   D. 72 square inches

13. A classroom globe has a diameter of 18 inches.

Which of the following is the approximate surface area, in square inches, of the globe? (Surface Area $= 4\pi r^2$)

A. 113.0   B. 226.1   C. 254.3   D. 1017.4

14. The right circular cylinder represented below has a base radius of 3 centimeters and a height of 12 centimeters.
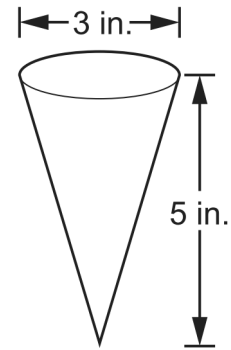
12 cm

3 cm
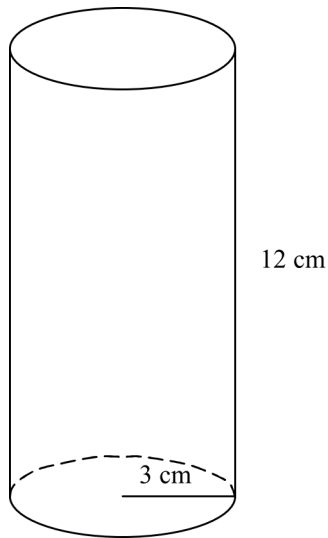
What is the volume of the right circular cylinder in cubic centimeters?

A. $36\pi \,\text{cm}^3$

B. $72\pi \,\text{cm}^3$

C. $108\pi \,\text{cm}^3$

D. $432\pi \,\text{cm}^3$

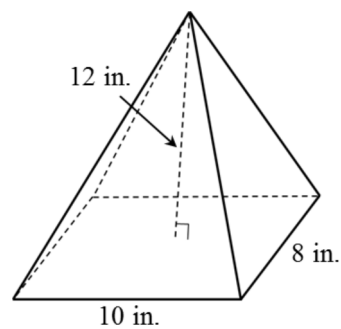15. Cecil has a paper cup in the shape of a cone, as shown below.

Cecil's Paper Cup

3 in.

5 in.

What is the volume of Cecil's paper cup?

A. $2\frac{1}{2}\pi$ cubic in.

B. $3\frac{3}{4}\pi$ cubic in.

C. 15π cubic in.

D. 60π cubic in.
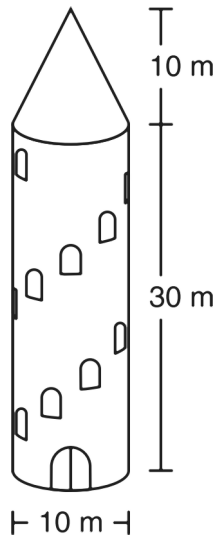
16. What is the volume of the rectangular pyramid?

12 in.

8 in.

10 in.

A. 72 cubic inches

B. 200 cubic inches

C. 320 cubic inches

D. 960 cubic inches

17. A sphere had a 6-inch radius (r). What was the volume of the sphere?

A. 24π cubic inches   B. 32π cubic inches

C. 216π cubic inches   D. 288π cubic inches

18. This diagram represents a tower. The tower is in the shape of a cone on top of a cylinder.

Which measurement is closest to the total volume of the tower?

A. 2,200 cubic meters

B. 2,600 cubic meters

C. 9,400 cubic meters

D. 10,500 cubic meters

19. A right regular pyramid is placed on a rectangular prism with a square base as pictured on the left. What is the surface area of the figure?
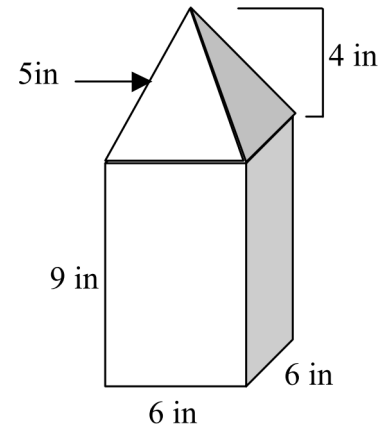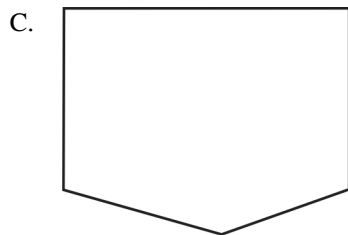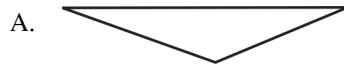

A. 300 sq. in   B. 312 sq. in
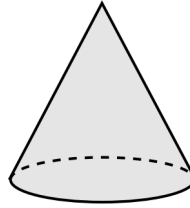
C. 348 sq. in   D. 384 sq. in

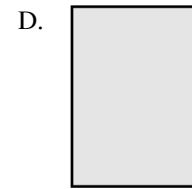20. Use the diagram below to answer the question.
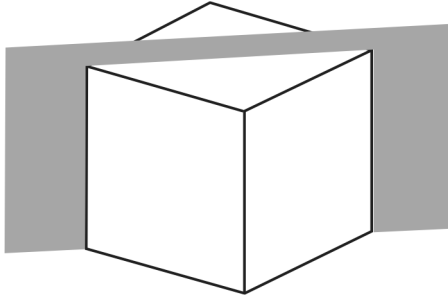
Which shape *best* represents the 2-dimensional shape formed by the slice made by the plane through the vertices of the cube shown?
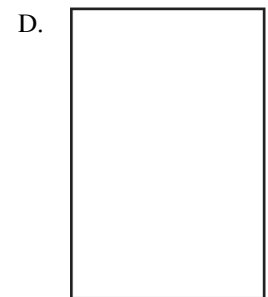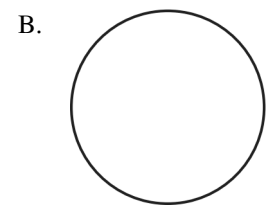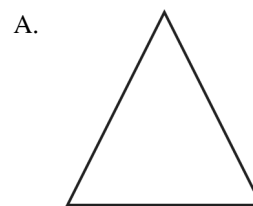
A.

B.

C.

D.

21. A right circular cone is represented by the drawing below.

Which figure could *not be* a cross section of a right circular cone?

A.

B.

C.

D.
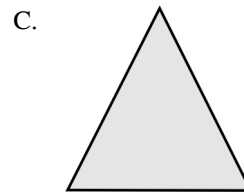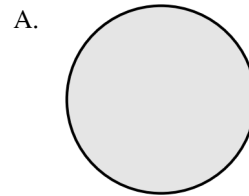
22. Which of the following *cannot* be a cross section of a right circular cylinder?
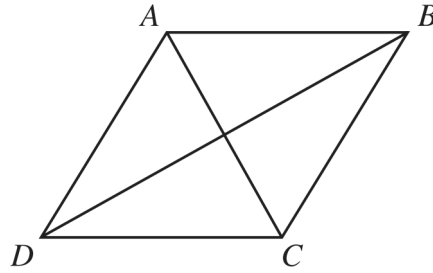
A.

B.

C.

D.

Geometry Quiz Review

23. Which of the following is always true?

    A. A rectangle is a square.

    B. A rhombus is a rectangle.

    C. A parallelogram is a rhombus.

    D. A rectangle is a parallelogram.

25. Which of the following *must* be true for the rhombus shown below?

    A. $m\angle DAB = m\angle ABC$

    B. $m\angle DAB + m\angle ABC = 90°$

    C. $m\angle DAC + m\angle BAC = 90°$

    D. $m\angle DAC = m\angle BAC$

24. What do all rectangles and parallelograms have in common?

    A. All rectangles and parallelograms have two sets of parallel lines.

    B. All rectangles and parallelograms have sides that are equal in length.

    C. All rectangles and parallelograms have right angles.

    D. All rectangles and parallelograms have diagonals that are equal in length.

26. Which polygon shows diagonals that are perpendicular to each other?

    A.   pentagon

    B.   rhombus

    C.   rectangle

    D.   trapezoid
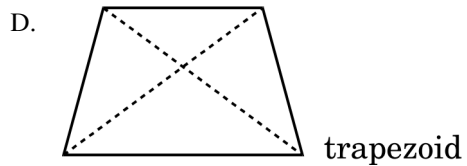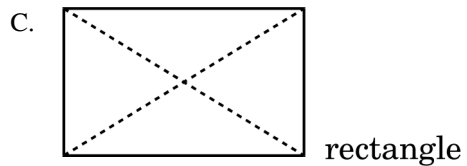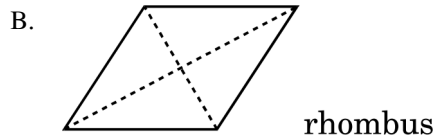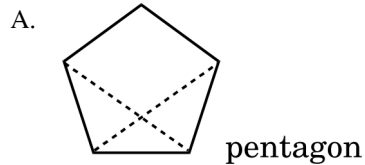
27. Name the geometric solid represented by the two-dimensional net below.
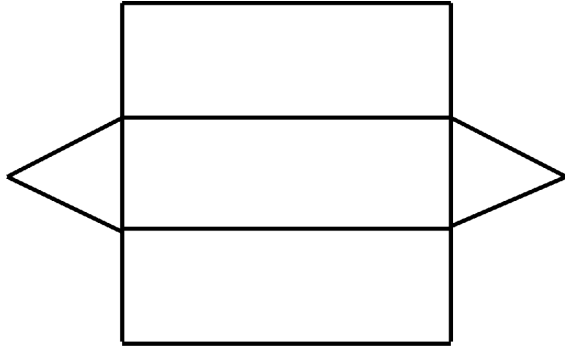
    A.   triangular pyramid

    B.   rectangular pyramid

    C.   triangular prism

    D.   rectangular prism

28. Find the length of a diagonal of the square whose side is 10.

29. The diagonals of a rhombus are 6 and 4. What is the measure of each side?

    A. $\sqrt{52}$ B. $\sqrt{13}$ C. 5   D. 4

30. A quadrilateral with four congruent sides and an angle measuring $60°$ must be a

    A.   rhombus   B.   square

    C.   rectangle   D.   trapezoid

31. $\overline{AU}$, $\overline{BV}$, and $\overline{CW}$ are the medians of $\triangle ABC$. If $AP = 2x^2$ and $PU = 4x$, then the value of x is:

    A. $\frac{4}{3}$ B. $\frac{3}{4}$

    C. 1   D. 4
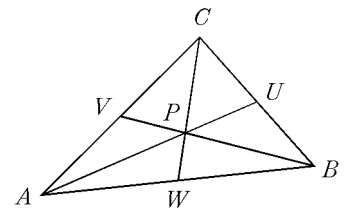
32. The point of concurrency of the medians of a triangle is called the:

    A.   centroid   B.   orthocenter

    C.   incenter   D.   circumcenter

33. If D, E, and F are the midpoints of their respective sides of $\triangle ABC$ and $GE = 6$, then AE is:

    A. 9   B. 18

    C. 15   D. 12

Geometry Quiz Review   11/18/2019

1.
Answer: C
Points: 1

2.
Answer: A
Points: 1
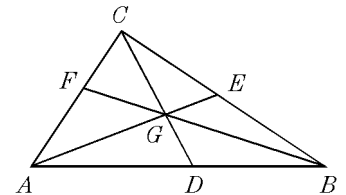
3.
Answer:
Points: 1

4.
Answer: B
Points: 1

5.
Answer: B
Points: 1

6.
Answer: D
Points: 1

7.
Answer: D
Points: 1

8.
Answer: D
Points: 1

9.
Answer: C
Points: 1

10.
Answer: D
Points: 1

11.
Answer: D
Points: 1

12.
Answer: D
Objective: LA M-3-H
Points: 1

13.
Answer: D
Points: 1

14.
Answer: C
Points: 1

15.
Answer: B
Objective: CC 8.G.9
Points: 1

16.
Answer: C
Points: 1

17.
Answer: D
Points: 1

18.
Answer: B
Points: 1

19.
Answer: D
Points: 1

20.
Answer: D
Objective: CC 7.G.3
Points: 1

21.
Answer: D
Objective: MA 10.G.10
Points: 1

22.
Answer: A
Objective: MA 10.G.10
Points: 1

23.
Answer: D
Points: 1

24.
Answer: A
Points: 1

25.
Answer: D
Objective: MA 10.G.1
Points: 1

26.
Answer: B
Points: 1

27.
Answer: C
Points: 1

28.
Answer: $10\sqrt{2}$
Points: 1

29.
Answer: B
Points: 1

30.
Answer: A
Points: 1

31.
Answer: D
Points: 1

32.
Answer: A
Points: 1

33.
Answer: D
Points: 1