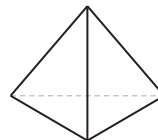


LESSON 135 Review: 3rd Quarter

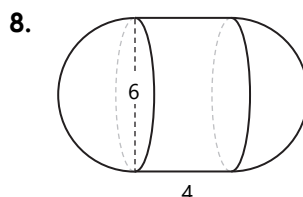
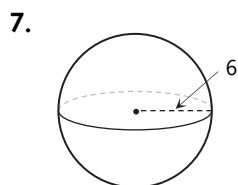
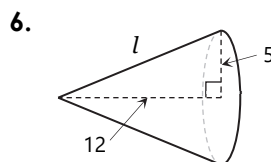
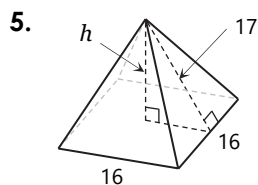
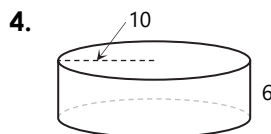
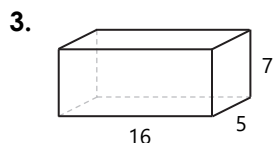
Let's review. Be sure to check the corresponding lesson(s) if you get any problem(s) wrong.

(Lesson 111) Use the solid on the right.



1. Name the solid and sketch its net.
2. Show that the Euler's formula works for the solid.

(Lessons 112 ~ 116 & 118) Find the surface area and volume of each solid. Leave π as π .



(Lessons 117 & 119 ~ 120) Solve. Round all calculations to the nearest tenth, if applicable.

9. Two similar square pyramids have volumes 15 ft^3 and 405 ft^3 . The base area of the smaller pyramid is 9 ft^2 . What is the base area of the larger pyramid?
10. Describe the cross section obtained when a plane cuts a square pyramid parallel to its base.
11. Describe the solid created by rotating a right triangle around one of its legs.
12. A spherical balloon with radius 6 inches is leaking air at 5 cubic inches per minute. How long will it take for the balloon to empty fully? Use $22/7$ as π .
13. Water weighs about 62 pounds per cubic foot. An aquarium is a rectangular box 10 feet long, 5 feet wide, and 5 feet tall. How many pounds of water can the aquarium hold?
14. The population density of a town is 250 people per square mile. The area of the town is 82 square miles. What is the population of the town?

(Lesson 122) Solve. Leave answers in simplest radical form.

15. Find the length of a segment whose endpoints are $(3, 2)$ and $(1, -4)$.
16. Find the midpoint between $(2, -9)$ and $(6, 7)$.

(Lesson 123) \overline{AB} is a directed line segment from A to B . Find each point.

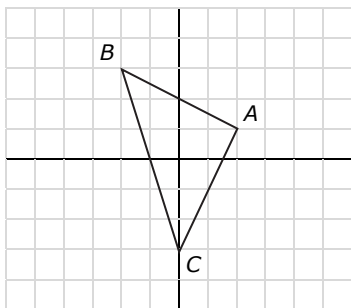
17. On a number line, A is at 2 and B is at 17. Find P that partitions \overline{AB} in the ratio 1:2.
18. Given $A(6, -5)$ and $B(1, 10)$, find P that partitions \overline{AB} in the ratio 3:2.

(Lessons 124 & 125) Solve.

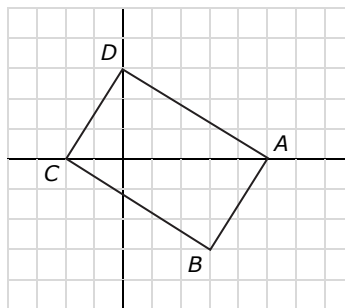
19. Write an equation of a line parallel to $y = 3x$ and passing through $(2, 1)$.
20. Write an equation of a line perpendicular to $x - 2y = 0$ and passing through $(1, -1)$.
21. Find the distance from $P(0, -2)$ to line $y = x + 4$.

(Lesson 126) Classify each polygon.

22. Classify triangle ABC as *equilateral*, *isosceles*, or *scalene*.



23. Classify quadrilateral $ABCD$ as precisely as possible.



(Lessons 127 & 128) Solve.

24. Write the standard equation of a circle with center $(1, 2)$ and passing through $(5, 0)$.
25. Find the center and radius of a circle with equation $x^2 + y^2 + 6x - 4y - 12 = 0$.

(Lesson 130) A triangle is placed on a coordinate plane as shown.

26. \overline{MN} is a midsegment. Find the coordinates of M and N .
27. Write a coordinate proof to prove that a midsegment is parallel to the third side and is half its length. This is the Triangle Midsegment Theorem [46.1].

