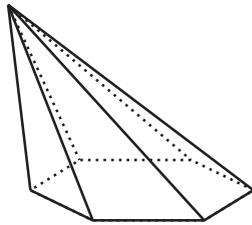


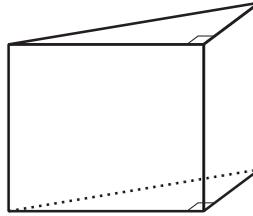
## Unit 5 Lesson 12 HOMEWORK #21

1. Give each solid a geometric name. Be as precise as you can.

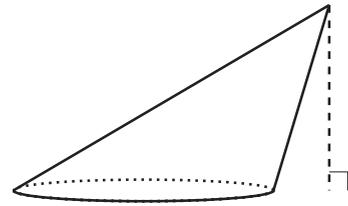
A



B



C



2. Each set of two-dimensional shapes is the complete list of faces from a particular solid. Match each set of shapes with the solid they came from.

A. 2 congruent triangles and 3 rectangles

B. 4 triangles and 1 rectangle

C. 2 squares and 4 congruent parallelograms

D. 4 congruent, equilateral triangles

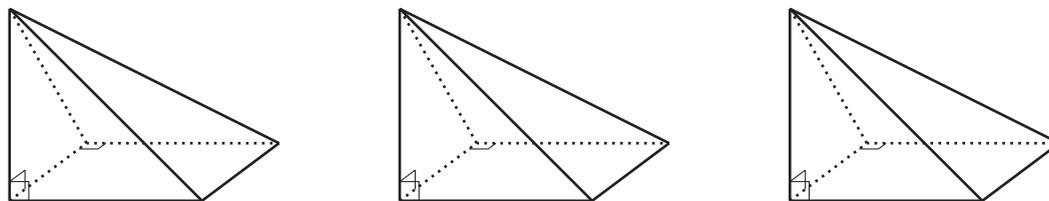
1. right triangular prism

2. oblique square prism

3. right triangular pyramid

4. rectangular pyramid

3. These 3 congruent square pyramids can be assembled into a cube with side length 1 foot. What is the volume of each pyramid?

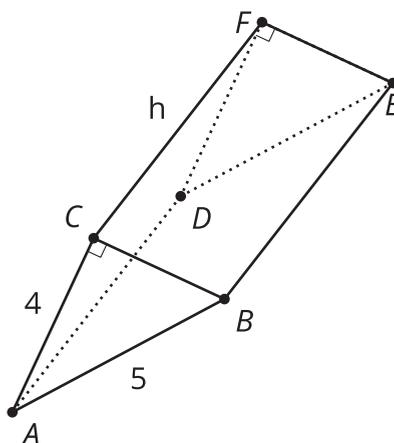


4. A prism has a height of 4 inches and a volume of 120 cubic inches. Select **all** figures that could be the base for this prism.

- A. a 5 inch by 6 inch rectangle
- B. a square with side length 5 inches
- C. a circle with radius 5 inches
- D. a star-shaped base with area 30 square inches
- E. a right triangle with legs 5 inches and 12 inches

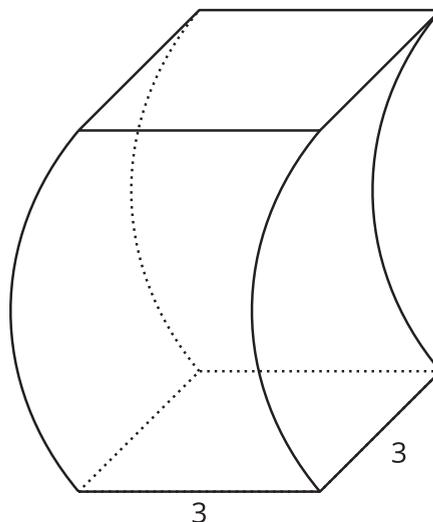
(From Unit 5, Lesson 11.)

5. This prism has a right triangle for a base. The volume of the prism is 54 cubic units. What is the value of  $h$ ?



(From Unit 5, Lesson 11.)

6. This solid has curved sides. All cross sections parallel to the base are squares measuring 3 units on each side. The height from the base to the top is 5 units. What is the volume of this solid?



(From Unit 5, Lesson 10.)

7. Find the volume of each solid.
- a cylinder with radius 3 inches and height 2 inches
  - a hexagonal prism whose base has area 4.5 square centimeters and whose height is 7 centimeters
  - a prism 5 feet tall whose base is a right triangle with leg lengths  $\frac{3}{2}$  feet and 9 feet

(From Unit 5, Lesson 9.)

8. A circle with area  $\pi$  square units is dilated using a scale factor of 5. What is the area of the dilated circle?

(From Unit 5, Lesson 4.)