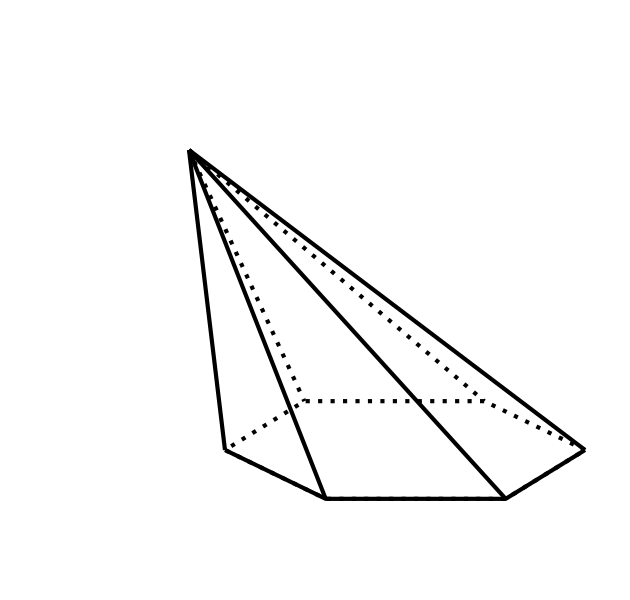
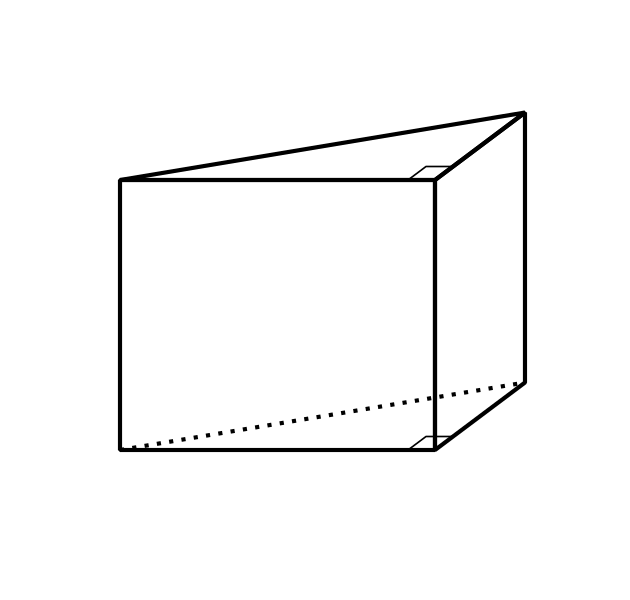
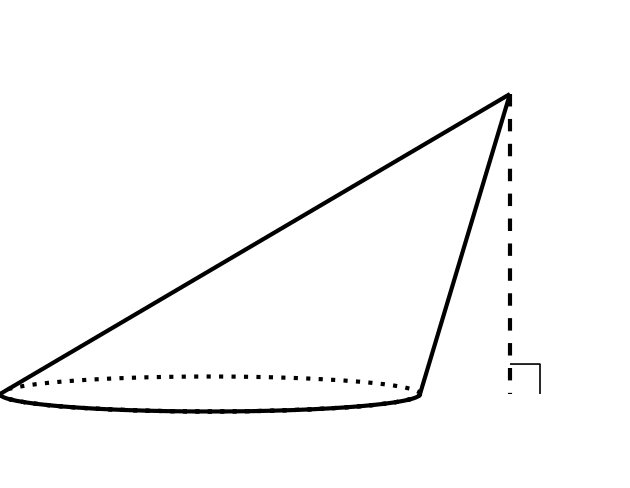
### Lesson 12 Practice Problems

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

* A
* 
* B
* 
* C
* 

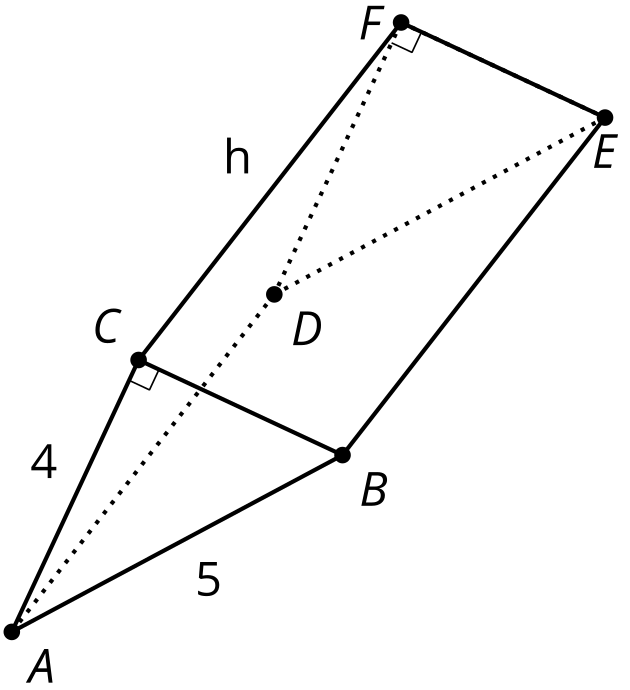
1. Each set of two-dimensional shapes is the complete list of faces from a particular solid. Match each set of shapes with the solid they came from.
   1. 2 congruent triangles and 3 rectangles
   2. 4 triangles and 1 rectangle
   3. 2 squares and 4 congruent parallelograms
   4. 4 congruent, equilateral triangles
   5. right triangular prism
   6. oblique square prism
   7. right triangular pyramid
   8. rectangular pyramid
2. These 3 congruent square pyramids can be assembled into a cube with side length 1 foot. What is the volume of each pyramid?

* 
* 
* 

1. 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.
   1. a 5 inch by 6 inch rectangle
   2. a square with side length 5 inches
   3. a circle with radius 5 inches
   4. a star-shaped base with area 30 square inches
   5. a right triangle with legs 5 inches and 12 inches

* (From Unit 5, Lesson 11.)

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

* 
* (From Unit 5, Lesson 11.)

1. 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.)

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

* (From Unit 5, Lesson 9.)

1. A circle with area square units is dilated using a scale factor of 5. What is the area of the dilated circle?

* (From Unit 5, Lesson 4.)



© CC BY 2019 by Illustrative Mathematics®