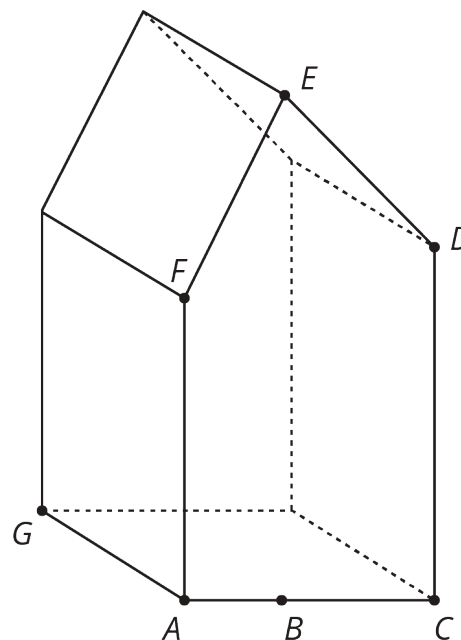


## Lesson 13 Practice Problems

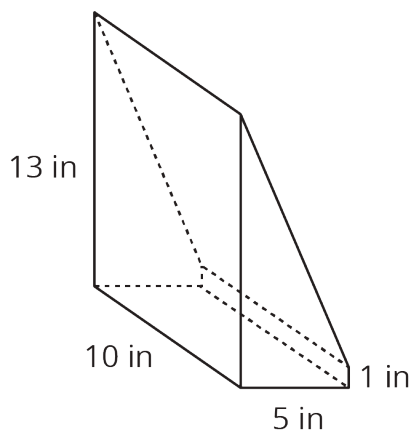
1. You find a crystal in the shape of a prism. Find the volume of the crystal.

The point  $B$  is directly underneath point  $E$ , and the following lengths are known:

- From  $A$  to  $B$ : 2 mm
- From  $B$  to  $C$ : 3 mm
- From  $A$  to  $F$ : 6 mm
- From  $B$  to  $E$ : 10 mm
- From  $C$  to  $D$ : 7 mm
- From  $A$  to  $G$ : 4 mm



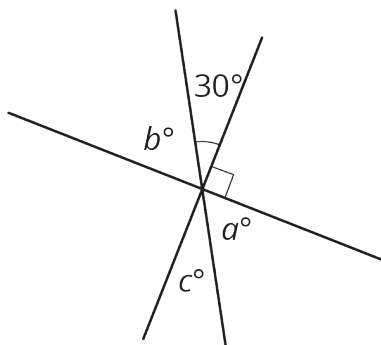
2. A rectangular prism with dimensions 5 inches by 13 inches by 10 inches was cut to leave a piece as shown in the image. What is the volume of this piece? What is the volume of the other piece not pictured?



3. A triangle has one side that is 7 cm long and another side that is 3 cm long.
- Sketch this triangle and label your sketch with the given measures. (If you are stuck, try using a compass or cutting some straws to these two lengths.)
  - Draw one more triangle with these measures that is not identical to your first triangle.
  - Explain how you can tell they are not identical.

(From Unit 7, Lesson 9.)

4. Select **all** equations that represent a relationship between angles in the figure.



- A.  $90 - 30 = b$
- B.  $30 + b = a + c$
- C.  $a + c + 30 + b = 180$
- D.  $a = 30$
- E.  $a = c = 30$
- F.  $90 + a + c = 180$

(From Unit 7, Lesson 4.)

5. A mixture of punch contains 1 quart of lemonade, 2 cups of grape juice, 4 tablespoons of honey, and  $\frac{1}{2}$  gallon of sparkling water. Find the percentage of the punch mixture that comes from each ingredient. Round your answers to the nearest tenth of a percent. (Hint: 1 cup = 16 tablespoons)

(From Unit 4, Lesson 9.)