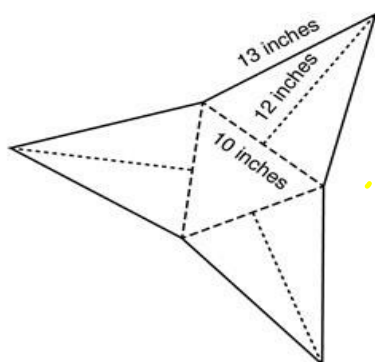
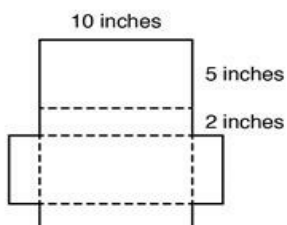


1. The net of a triangular pyramid is shown. A pyramid will be constructed by this pattern, but it will not have a base.



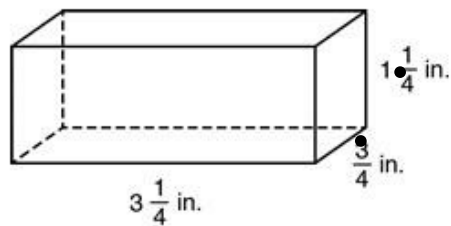
What is the surface area of the faces of the pyramid? Record your answer in square inches.

2. The net of a rectangular prism is shown.



What is the surface area, in square inches, of the figure shown in the net?

3. A small, empty box is shown.



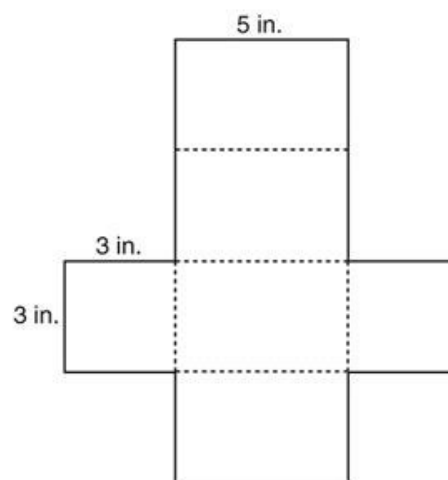
Which statements about this box are true?

Check all that apply.

Pick up to 4 answers.

- A. The volume of the box in cubic inches can be found by multiplying  $\frac{15}{16} \times 3\frac{1}{4}$ .
- B. The volume of the box is  $3\frac{3}{64}$  cubic inches.
- C. It takes 195 cubes with  $\frac{1}{4}$ -inch edges to completely fill the box.
- D. The volume of the box can be found by multiplying  $3\frac{1}{4}$  inches,  $\frac{3}{4}$  inch,  $1\frac{1}{4}$  inches.

4. Zoe is making a rectangular box with measurements as shown below.



What is the surface area of the box?

- A.  $78 \text{ in.}^2$
- B.  $60 \text{ in.}^2$
- C.  $46 \text{ in.}^2$
- D.  $15 \text{ in.}^2$

5. Which expression can be used to find the volume, in cubic units, of a rectangular prism with the dimensions shown below?

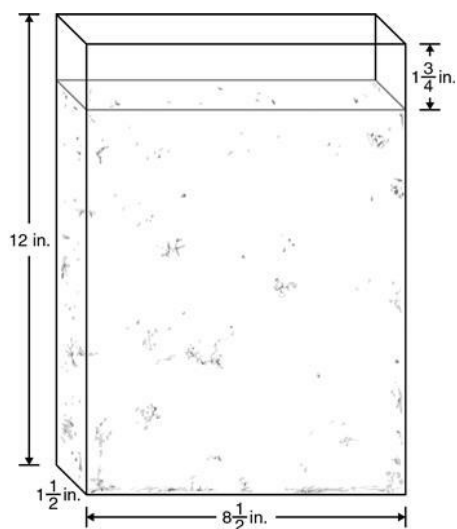
$$\text{length} = 2x \text{ units}$$

$$\text{width} = 4x \text{ units}$$

$$\text{height} = x \text{ units}$$

- A.  $7x^3$
- B.  $7x$
- C.  $8x^3$
- D.  $8x$

6. A container in the shape of a rectangular prism is used to hold sugar. The height of the container is 12 inches (in.). The current amount of sugar in the container is  $1\frac{3}{4}$  inches from the top of the container as shown in the figure below.

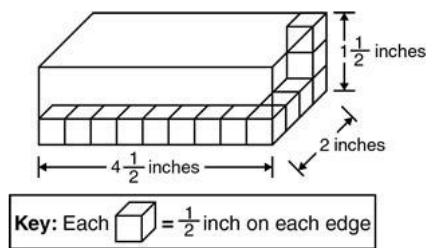


What is the volume, in cubic inches, of the total amount of sugar in the container?

- A.  $130\frac{11}{16}$
- B.  $137\frac{1}{16}$
- C.  $143\frac{7}{16}$
- D.  $175\frac{5}{16}$

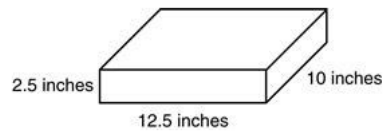


7. A storage box is shaped like a rectangular prism, as shown below. Skylar stored  $\frac{1}{2}$ -inch cubes in the box.



How many cubes are needed to completely fill the box?

- A. 108 cubes
  - B. 72 cubes
  - C. 54 cubes
  - D. 27 cubes
8. Maria has a gift box shaped like a rectangular prism.

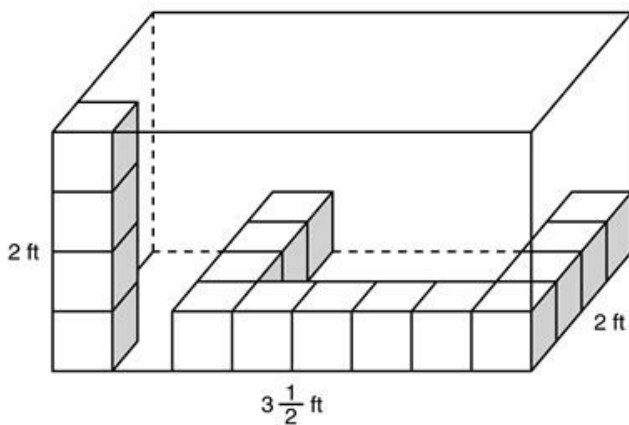


What is the volume of the box?

- A. 156.25 cubic inches
- B. 181.25 cubic inches
- C. 312.5 cubic inches
- D. 362.5 cubic inches

9. Jody has a plastic container in the shape of a rectangular prism. The container is  $8\frac{1}{2}$  inches long, 4 inches wide, and  $3\frac{1}{2}$  inches high. What is the volume of this plastic container?
- A. 119 cubic inches
  - B. 97 cubic inches
  - C. 34 cubic inches
  - D. 16 cubic inches

10. John has a storage bin in the shape of a rectangular prism. The storage bin measures  $3\frac{1}{2}$  feet long, 2 feet wide, and 2 feet tall. John will put boxes that measure  $\frac{1}{2}$  foot on each side into the bin.

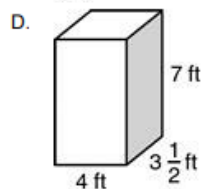
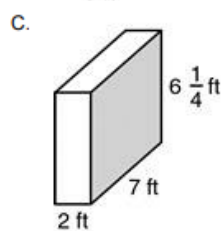
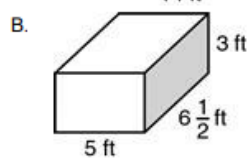


What is the greatest number of boxes John can put into the bin?

- A. 14
- B. 56
- C. 112
- D. 224

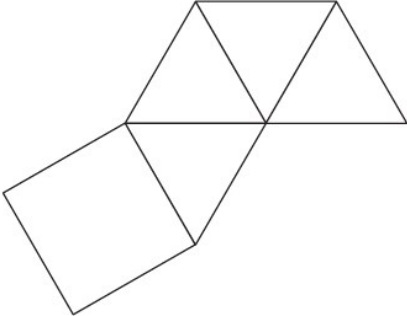


13. A manager at a shipping company will purchase boxes in the shape of right rectangular prisms. He wants the volume of each box to be exactly 98 cubic feet. Which figure shows a box with the dimensions, in feet (ft), that the manager will purchase?

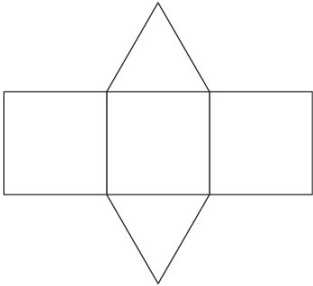


14. Which is the net for a square pyramid?

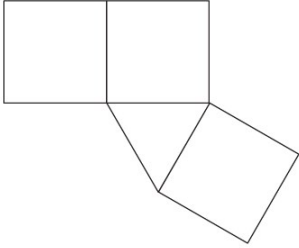
A



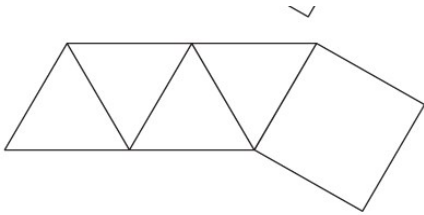
B



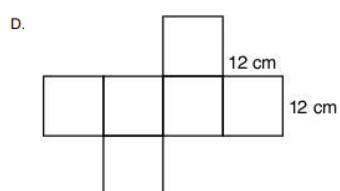
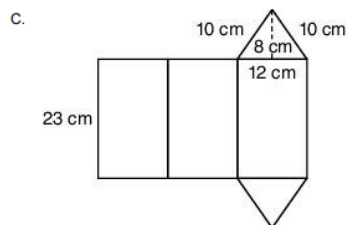
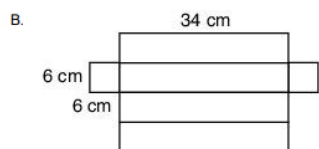
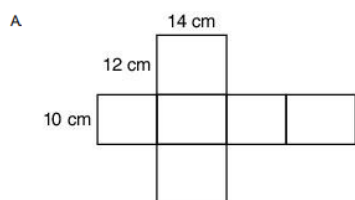
C



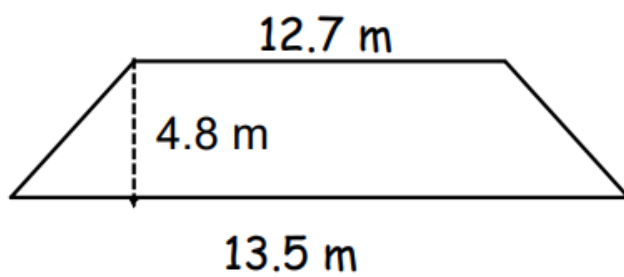
D

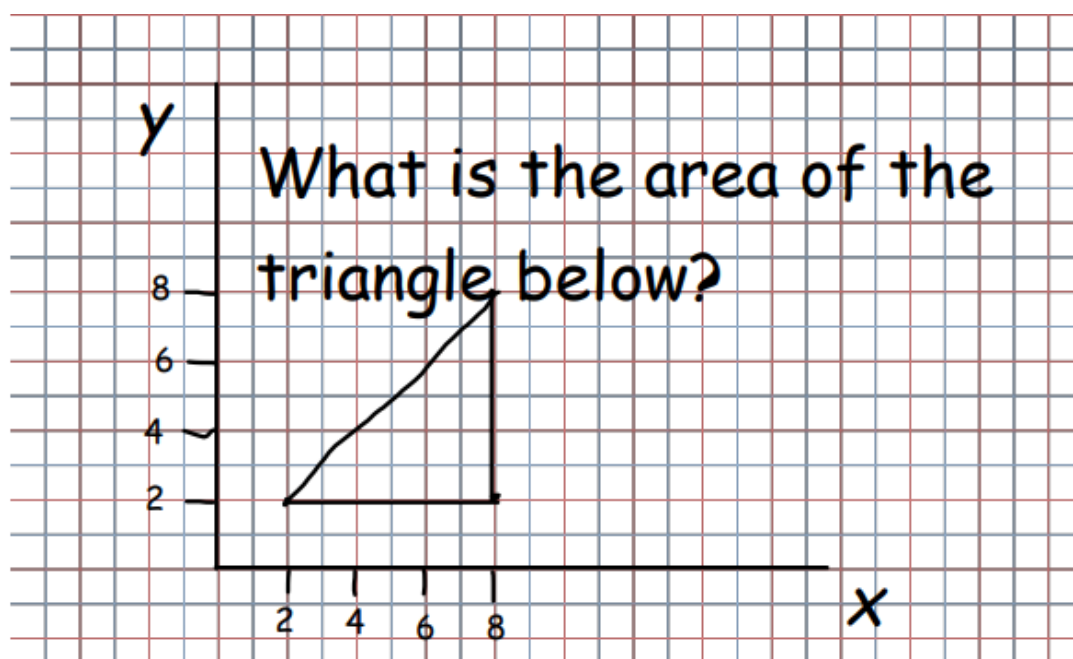


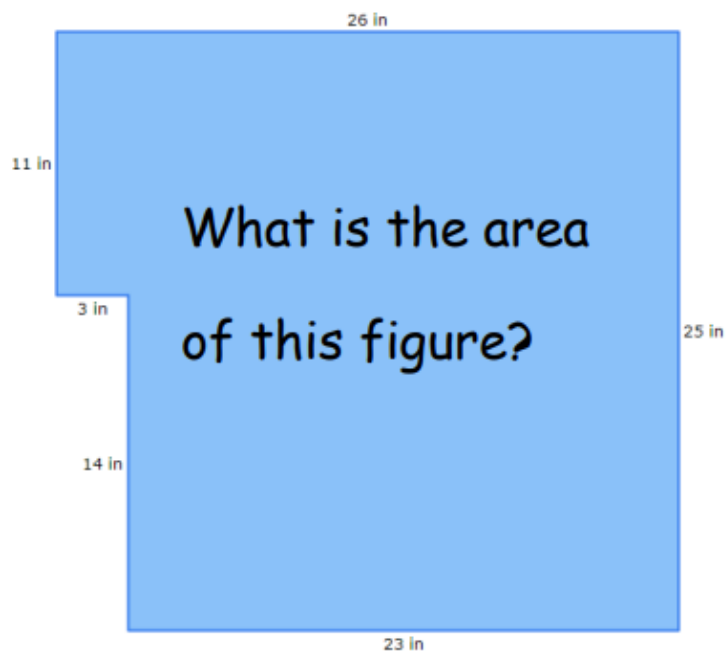
15. Which net represents a three-dimensional figure with a surface area of 864 square centimeters ( $\text{cm}^2$ )?



16. What is the area of the trapezoid?







What is the area of this figure?

