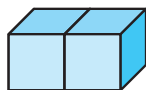


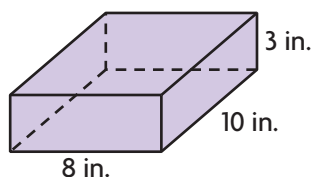
Name _____

Chapter Review

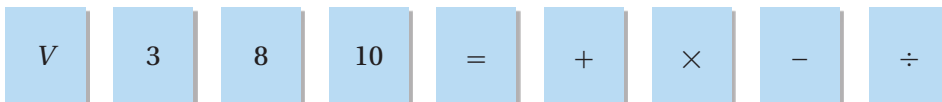
1. How many faces does this prism have?



2. Jose stores his baseball cards in a box like the one shown.

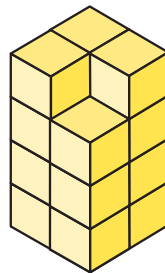
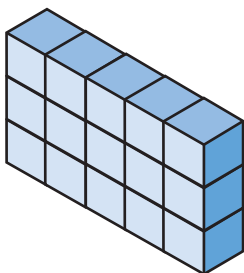


Use the numbers and symbols on the tiles to write a formula that represents the volume of the box. Symbols may be used more than once or not at all.

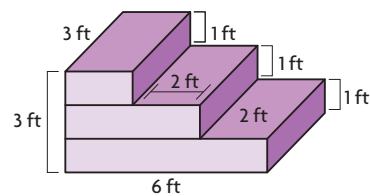


What is the volume of the box? _____ cubic inches

3. Compare the number of unit cubes in each three-dimensional figure. Use $<$, $>$, or $=$.

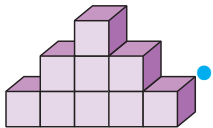
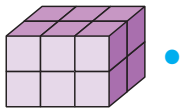
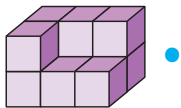


4. What is the volume of the composite figure?



_____ cubic feet

5. Match the figure with the number of unit cubes that would be needed to build each figure. Not every number of unit cubes will be used.



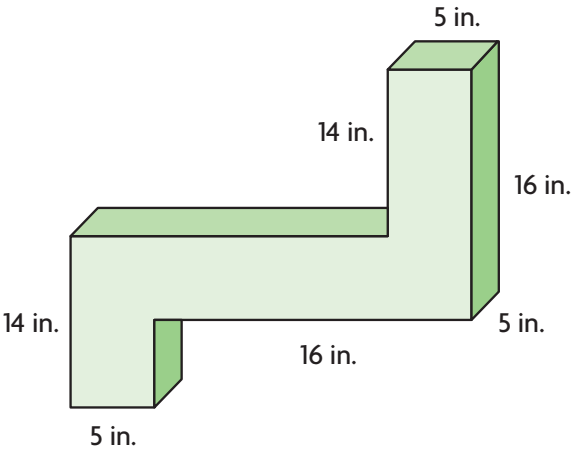
- 8 unit cubes
- 9 unit cubes
- 10 unit cubes
- 11 unit cubes
- 12 unit cubes
- 16 unit cubes

6. As part of a science project, Joaquim built the figure shown.

6a. How much space does the figure take up?

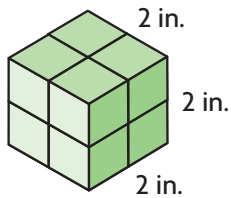
6b. What are the dimensions of the three rectangular prisms you used to find the volume of the figure?

6c. Draw lines on the figure to show how you could have divided it into prisms differently.

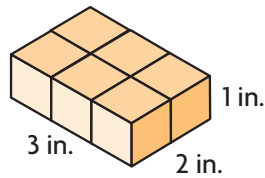


Name _____

7. Compare the volume of each three-dimensional figure. Use $<$, $>$, or $=$.

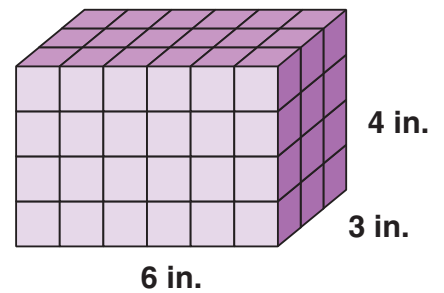


Each cube = 1 cu in.



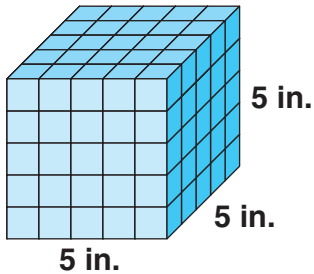
Each cube = 1 cu in.

8. Victoria used 1-inch cubes to build the rectangular prism shown. Find the volume of the rectangular prism Victoria built.



_____ cubic inches

9. A company ships its product in cubical boxes like the one shown.



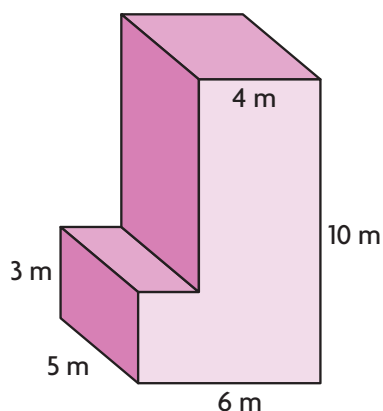
They ship 20 boxes in a carton. The carton is completely full with no gaps or overlap.

What is the volume of the carton?

10. A shipping crate holds 20 shoeboxes. The dimensions of a shoebox are 6 inches by 4 inches by 12 inches. For numbers 10a–10c, select True or False for each statement.

- 10a. Each shoebox has a volume of 22 cubic inches. ☐ True ☐ False
- 10b. Each crate has a volume of about 440 cubic inches. ☐ True ☐ False
- 10c. If the crate could hold 27 shoeboxes the volume of the crate would be about 7,776 cubic inches. ☐ True ☐ False

11. A storage locker has the shape shown.



- 11a. Show how to find the volume using addition.

The volume of the first rectangular prism is _____ m^3 .

The volume of the second rectangular prism is _____ m^3 .

The volume of the figure is _____ m^3 .

- 11b. Show how to find the volume using subtraction.

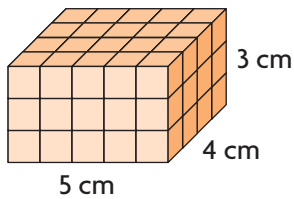
The volume of the greater rectangular prism is _____ m^3 .

The volume of the empty space that is subtracted is _____ m^3 .

The volume of the figure is _____ m^3 .

Name _____

12. The rectangular prism is made of 1-centimeter cubes.



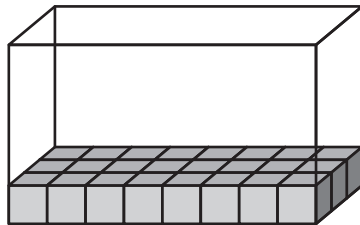
- 12a. If the height of the prism is doubled, what would be the volume of the prism?

_____ cm^3 .

- 12b. How much greater is the volume of the new prism than the one shown?

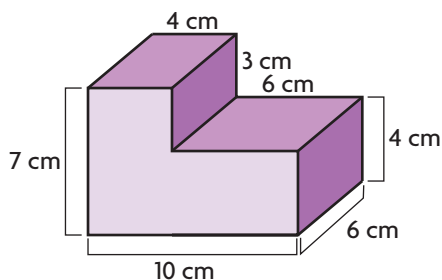
_____ cm^3 .

13. Mark packed 1-inch cubes into a box with a volume of 120 cubic inches. How many layers of 1-inch cubes did Mark pack?



_____ layers

14. A composite figure is shown. What is the volume of the composite figure?



Volume = _____ cubic centimeters

15. A pack of crayons has a length of 5 inches, a width of 3 inches, and a height of 1 inch. The packs of crayons will be stored in boxes that hold 15 packs of crayons. For numbers 15a–15c, select True or False for each statement.

15a. Each pack of crayons has a volume of 15 cubic inches. ☐ True ☐ False

15b. Each box has a volume of about 500 cubic inches. ☐ True ☐ False

15c. If the box only held 12 packs of crayons, it would have a volume of about 180 cubic inches. ☐ True ☐ False

16. Megan's aquarium has a volume of 4,320 cubic inches. Which could be the dimensions of the aquarium? Mark all that apply.

☐ A 16 in. by 16 in. by 18 in.

☐ C 12 in. by 15 in. by 24 in.

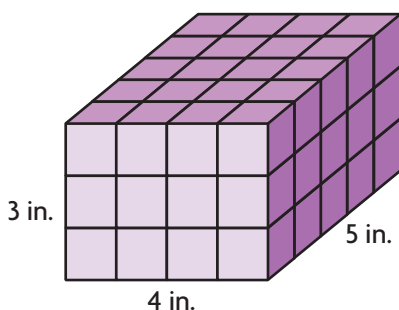
☐ B 14 in. by 18 in. by 20 in.

☐ D 8 in. by 20 in. by 27 in.

17. Ken keeps paper clips in a box that is the shape of a cube. Each side of the cube is 3 inches. What is the volume of the box?

_____ cubic inches

18. Monica used 1-inch cubes to make the rectangular prism shown. For 18a–18d, write the value that makes each statement true. Each value can be used more than once or not at all.



18a. Each cube has a volume of _____ cubic inch(es).

18b. Each layer of the prism is made up of _____ cubes.

18c. There are _____ layers of cubes.

18d. The volume of the prism is _____ cubic inches.