Name Date

1. Use your centimeter cubes to build the figures pictured below on centimeter grid paper. Find the total volume of each figure you built, and explain how you counted the cubic units. Be sure to include units.

B.

C.

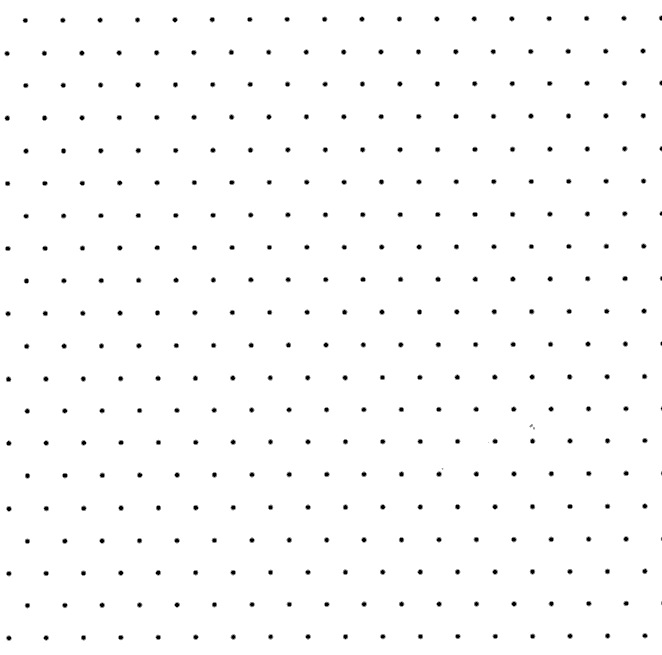
D.

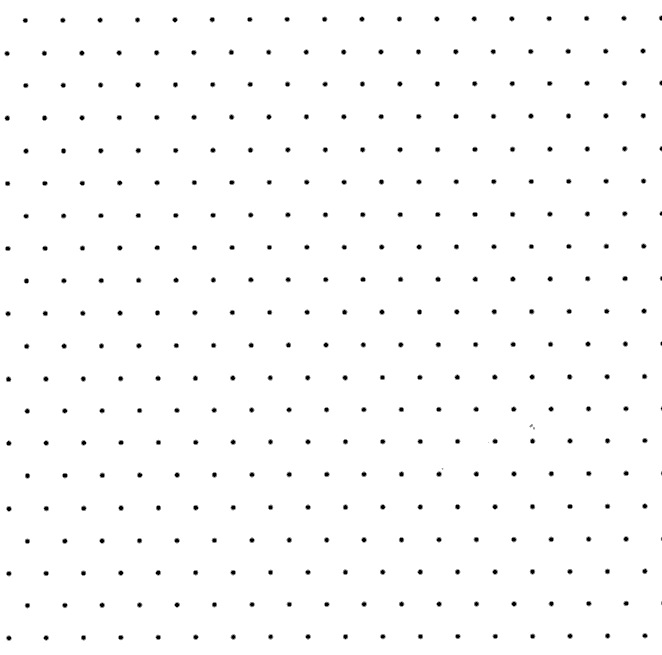
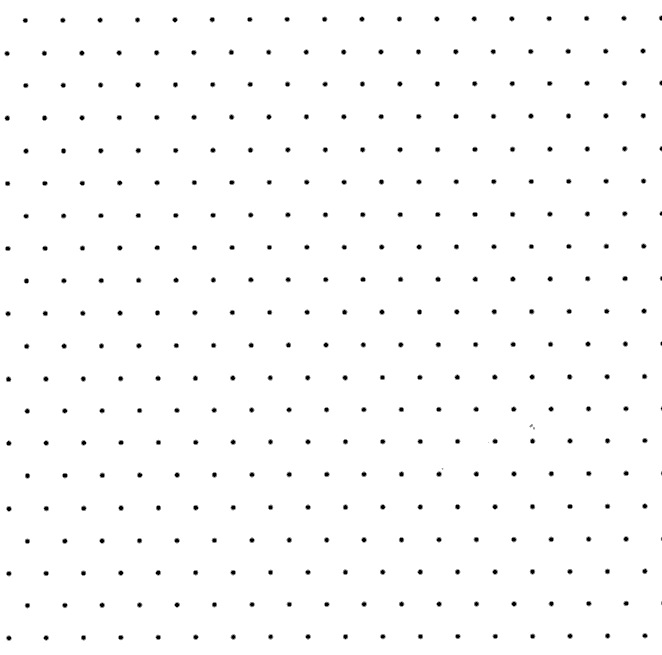
E.

F.

|  |  |  |
| --- | --- | --- |
| **Figure** | **Volume** | **Explanation** |
| A |  |  |
| B |  |  |
| C |  |  |
| D |  |  |
| E |  |  |
| F |  |  |

1. Build 2 different structures with the following volumes using your unit cubes. Then, draw one of the figures on the dot paper. One example has been drawn for you.
   1. 4 cubic units b. 7 cubic units c. 8 cubic units





1. Joyce says that the figure below, made of 1 cm cubes, has a volume of 5 cubic centimeters.

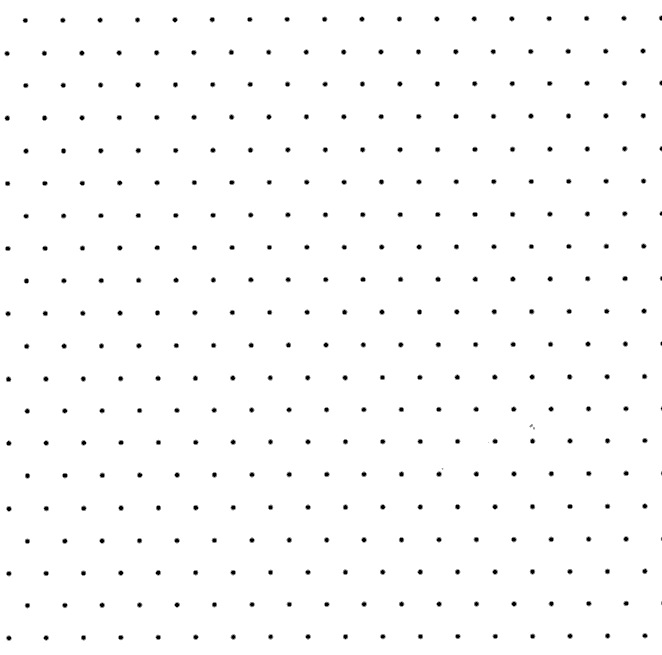
1. Explain her mistake.
2. Imagine if Joyce wants to build a second layer of the same structure identical to the figure above. What would its volume be then? Explain how you know.

Name Date

1. What is the volume of the figures pictured below?

a. b.

1. Draw a picture of a figure with a volume of 3 cubic units on the dot paper.



Name Date

1. The following solids are made up of 1 cm cubes. Find the total volume of each figure, and write it in the chart below.

A.

B.

C.

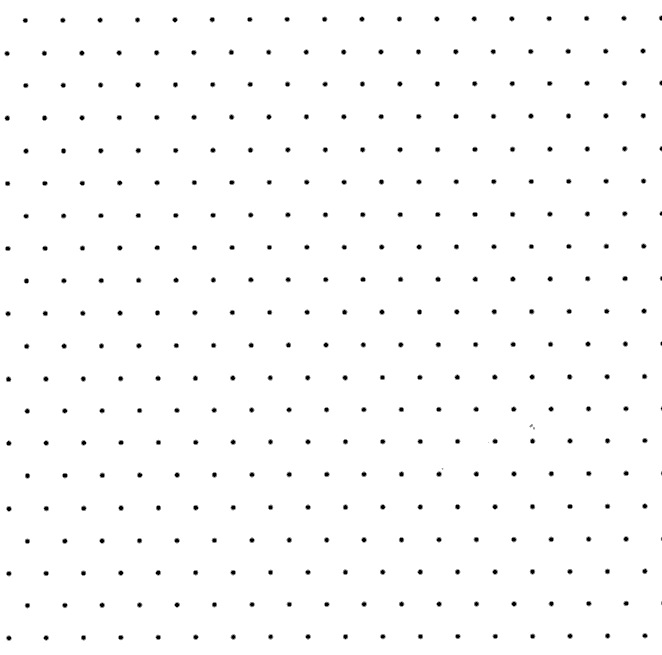
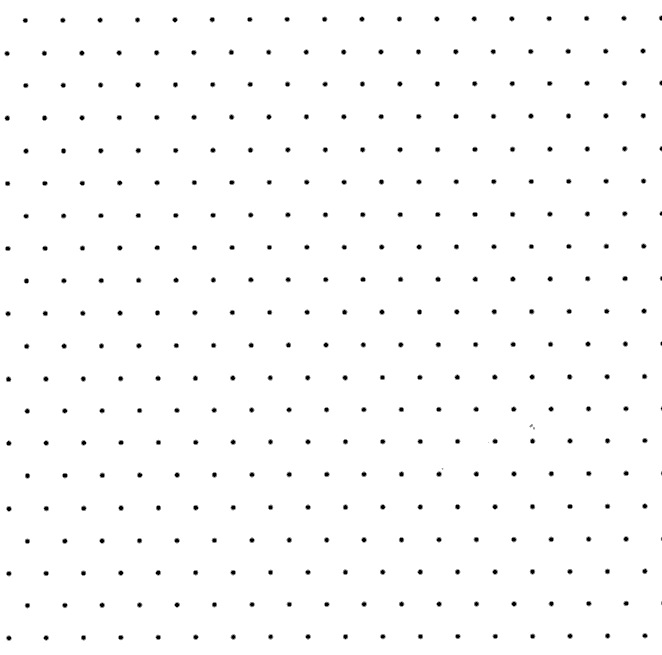
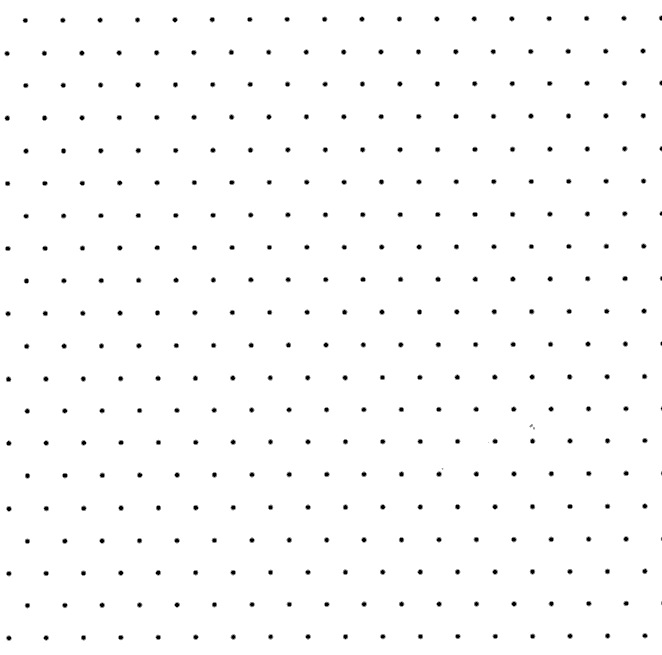
D.

E.

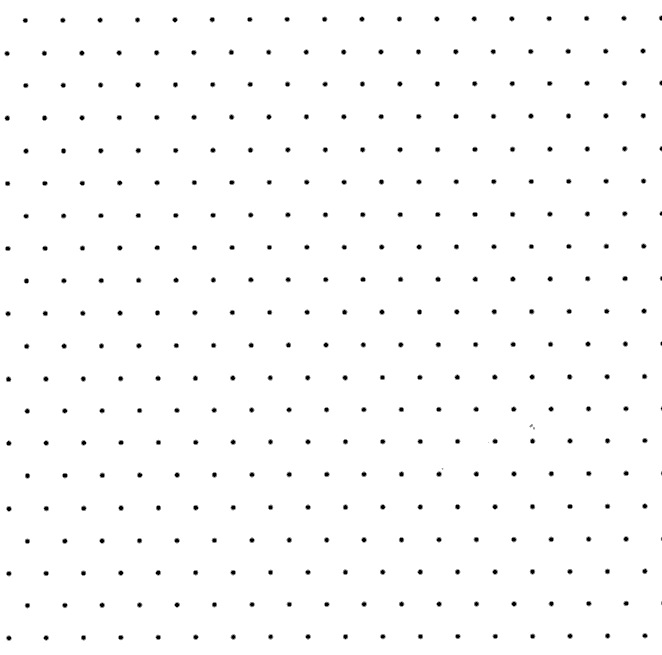
F.

|  |  |  |
| --- | --- | --- |
| **Figure** | **Volume** | **Explanation** |
| A |  |  |
| B |  |  |
| C |  |  |
| D |  |  |
| E |  |  |
| F |  |  |

1. Draw a figure with the given volume on the dot paper.
   1. 3 cubic units b. 6 cubic units c. 12 cubic units



1. John built and drew a structure that has a volume of 5 cubic centimeters. His little brother tells him he made a mistake because he only drew 4 cubes. Help John explain to his brother why his drawing is accurate.
2. Draw another figure below that represents a structure with a volume of 5 cubic centimeters.



**[[1]](#footnote-1)**

**[[2]](#footnote-2) **

1. centimeter grid paper [↑](#footnote-ref-1)
2. isometric dot paper [↑](#footnote-ref-2)