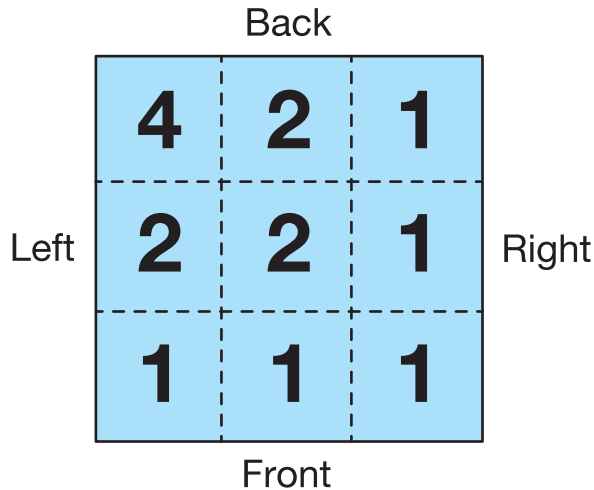
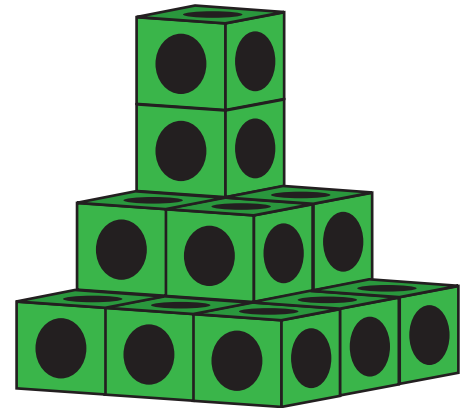


# “What If” Volume Problems

Both Sara and Sam used this building plan to build the same buildings.



**Sara and Sam’s Building Plan**



1. What is the volume of this building?

\_\_\_\_\_ cubic units

2. What if Sam added one story to each column of his building? What will the new volume be? Write a number sentence to describe the new volume in cubic units.

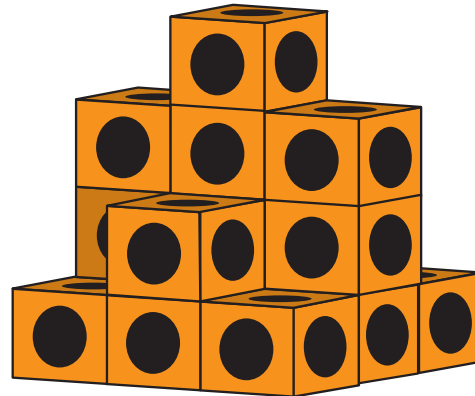
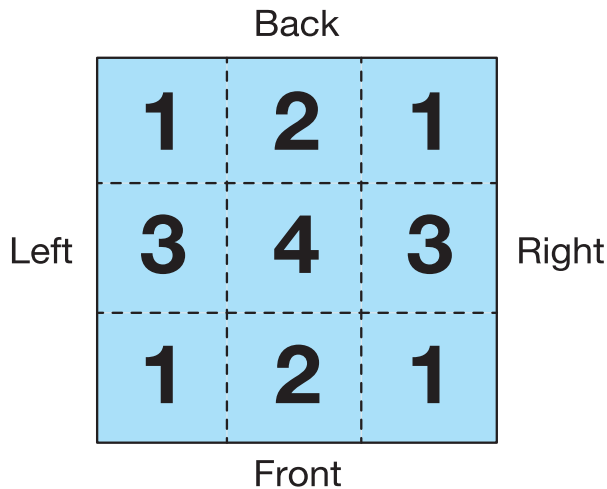
\_\_\_\_\_ cubic units

3. What if Sara made all the columns on her building the same height as the tallest column? Write a number sentence to describe this volume in cubic units.

\_\_\_\_\_ cubic units

 **Check-In: Questions 4–6**

**Miguel and Tara used this building plan to build the same buildings.**



**Miguel and Tara's Building Plan**

**4.** What is the volume of this building?

\_\_\_\_\_ cubic units

**5.** What if Miguel added two stories to each column of his building? What would the new volume be? Write a number sentence to describe the new volume in cubic units.

\_\_\_\_\_ cubic units

**6.** What if Tara decided to make the center column of her building seven stories high instead of four stories high? What would the new volume be? Write a number sentence to describe this volume in cubic units.

\_\_\_\_\_ cubic units

Name \_\_\_\_\_ Date \_\_\_\_\_

**“What If” Volume Problems  
Check-In: Questions 4–6  
Feedback Box**

|  | Expectation | Check In | Comments |
|--|-------------|----------|----------|
| Solve problems involving volume. [Q# 5–6]  | E2          |          |          |
| Apply the properties of addition to compose number sentences that represent the volume of a building. [Q# 5–6] | E3          |          |          |
| Make connections between a building of cubes, the building plan, and number sentences. [Q# 5–6]                | E4          |          |          |
| Count and add cubic units to find volume. [Q# 4–6]   | E8          |          |          |