

Grade 5 Unit 1

Lesson 6

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Unit 1 Lesson 6: Expressions for Volume

WU True or False: Parentheses or No Parentheses (Warm up)

Student Task Statement

Decide if each statement is true or false. Be prepared to explain your reasoning.

- $(4 \times 2) \times 5 = 4 \times (2 \times 5)$
- $(2 \times 5) \times 4 = 2 \times 20$
- $5 \times 4 \times 2 = 10 \times 40$

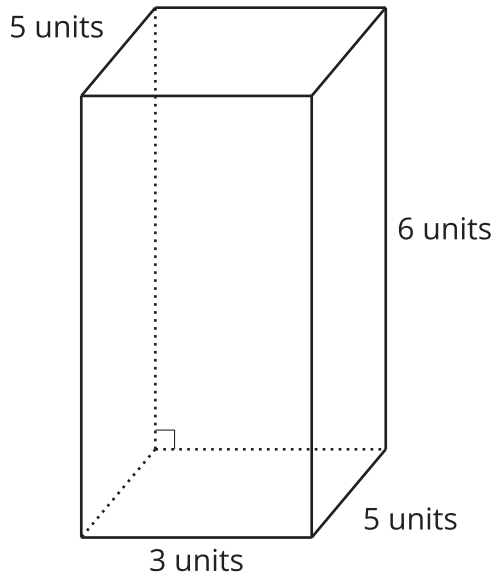
1 Card Sort: Match the Expression

Student Task Statement

1. Match each rectangular prism with the expression(s) that represents its volume in cubic units. Be prepared to explain your reasoning.
2. For each prism write one additional expression, not in the card sort, that represents its volume in cubic units.



Activity Synthesis

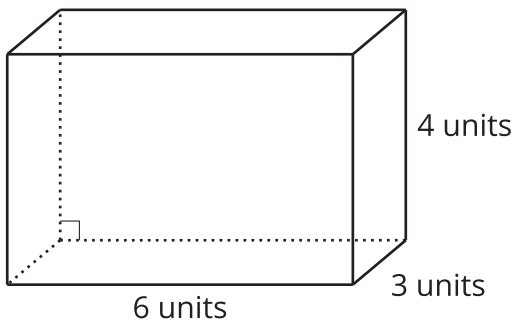


2 A Tale of Two Tables

Student Task Statement

1. Work with your partner to complete the tables. One partner completes Table 1 and the other completes Table 2.

Prism A



Prism B

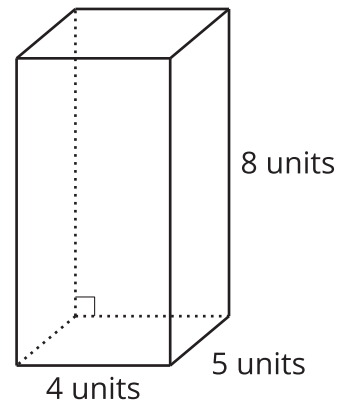


Table 1

	length (units)	width (units)	height (units)	volume (cubic units)
Prism A				
Prism B				

Table 2

	area of the base (square units)	height (units)	volume (cubic units)
Prism A			
Prism B			

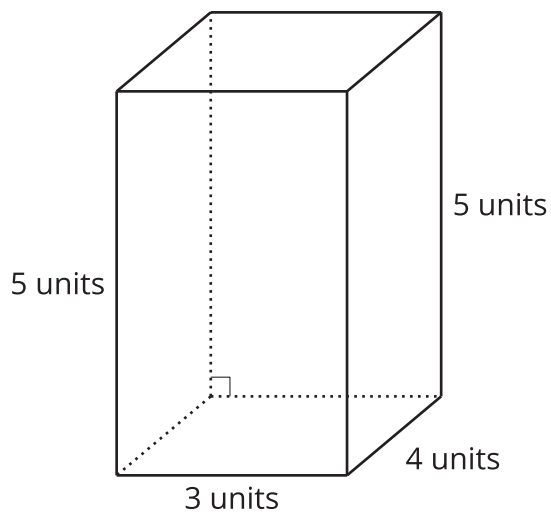
2. Compare your tables and discuss:
- What do the tables have in common?
 - What is different about the tables?

3 Two Truths and a Lie (Optional)

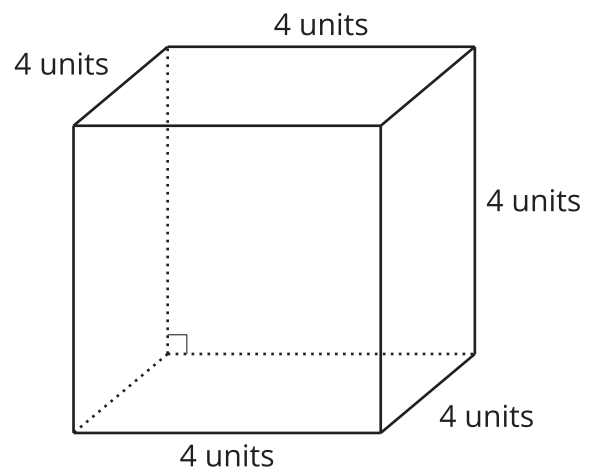
Student Task Statement

Your teacher will assign you and your partner two prisms.

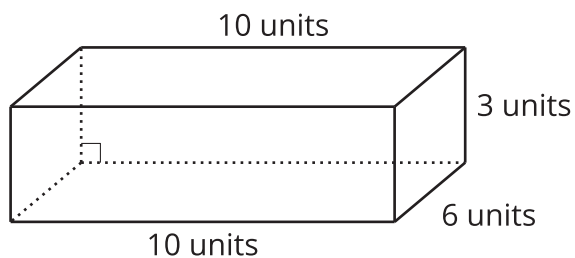
A



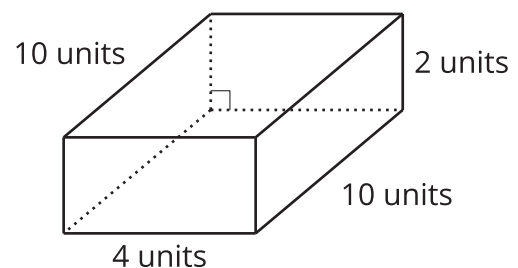
B



C



D



For each of your assigned prisms:

- Write 2 expressions to represent the volume in cubic units.
- Write 1 expression that does NOT represent the volume in cubic units.

Give your expressions to your partner:

1. For each prism, which expression does not represent its volume in cubic units? How do you know?
2. What other expressions represent the volume of this prism in cubic units?

Images for Activity Synthesis

