Section A: Practice Problems

1. **Pre-unit**

   Han says that the value of the 7 in 735,208 is 10 times the value of the 7 in 137,342. Do you agree with Han? Explain or show your reasoning.

2. **Pre-unit**

   Find the value of each product. Explain or show your reasoning.

   a. 27×53

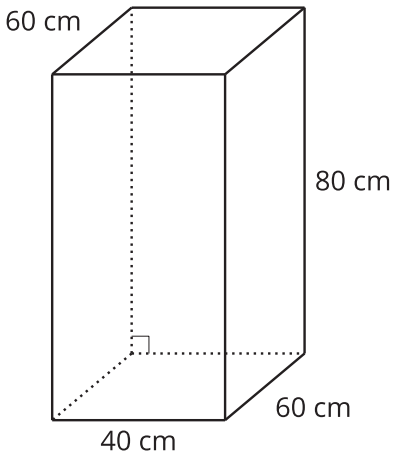
   b. 518×6

3. **Pre-unit**

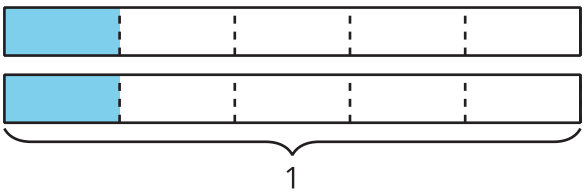
Find the value of $7{,}518 \div 6$. Explain or show your reasoning.

4. **Pre-unit**

What is the volume of this rectangular prism? Explain or show your reasoning.



5. **Pre-unit**



a. Explain or show how the drawing shows $2 \div 5$.

b. Explain or show how the drawing shows $\frac{2}{5}$.

6. Find the value of each product. Explain or show your reasoning.

   a. 100×50

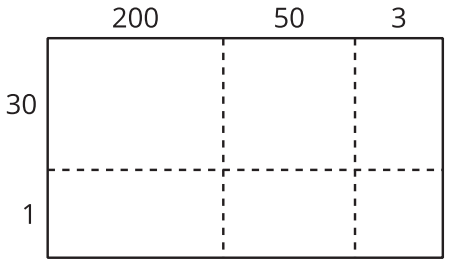
   b. 120×50

   c. 127×50

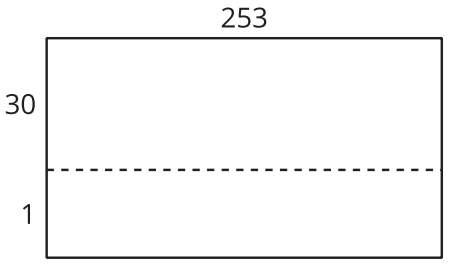
(From Unit 4, Lesson 1.)

7. Complete the diagrams and use each of them to find 253×31.

A



B



How are the strategies the same? How are they different?

(From Unit 4, Lesson 2.)

8. Find 315×43 using partial products.

(From Unit 4, Lesson 3.)

9. Use the standard algorithm to find the value of $16{,}452 \times 6$.

(From Unit 4, Lesson 4.)

10. Find the value of 322×41 using the standard algorithm.

(From Unit 4, Lesson 5.)

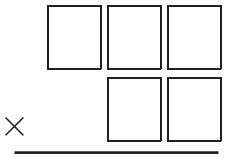
11. Find the value of 562×34 using the standard algorithm.

(From Unit 4, Lesson 6.)

12. Andre is playing Greatest Product. He says the greatest product it's possible to make in the game is 987×65. Do you agree with Andre? Explain or show your reasoning.

(From Unit 4, Lesson 7.)

13. Using the digits 1, 2, 3, 4, and 5 make a product that is close to 8,000.



(From Unit 4, Lesson 8.)

14. The recommended side lengths for a birdhouse for a yellow-bellied sapsucker are 13 cm by 13 cm for the floor and a height of 31 to 38 cm. What are the smallest and largest volumes for these birdhouses? Explain or show your reasoning.

(From Unit 4, Lesson 9.)

15. **Exploration**

Jada remembers that the partial products algorithm can go from left to right or from right to left. She wonders if the standard algorithm can also go in either direction.

a. Calculate 418×53 using partial products right to left and left to right.

b. Calculate 418×53 with the standard algorithm. What happens if you try to make the calculation from left to right?

16. **Exploration**

Clare has a strategy for multiplying a number by 99. To find 648×99 she calculates 648×100 and then subtracts 648.

a. Use Clare's strategy to calculate 648×99.

b. Use the standard algorithm to calculate 648×99.

c. Which strategy did you prefer? Why?