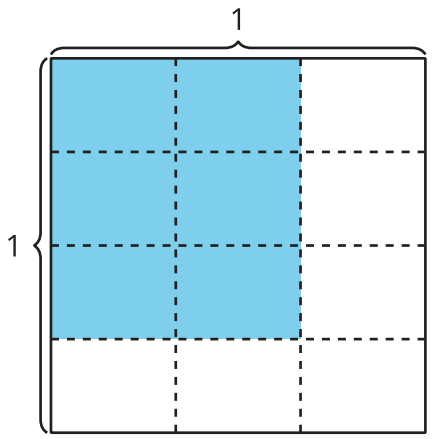
Lesson 6: Multiply Fractions

- Let's multiply two non-unit fractions using diagrams and expressions.

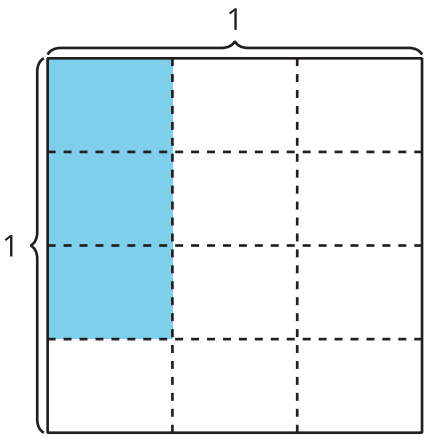
Warm-up: Which One Doesn't Belong: More Pieces

Which one doesn't belong?

A



B



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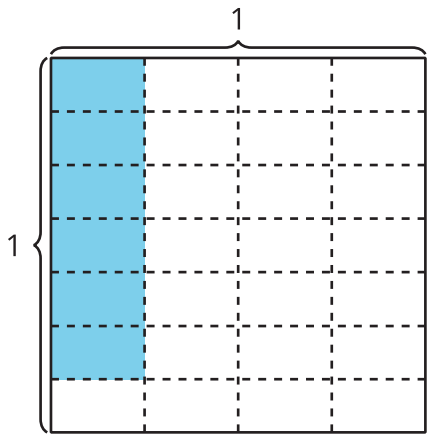
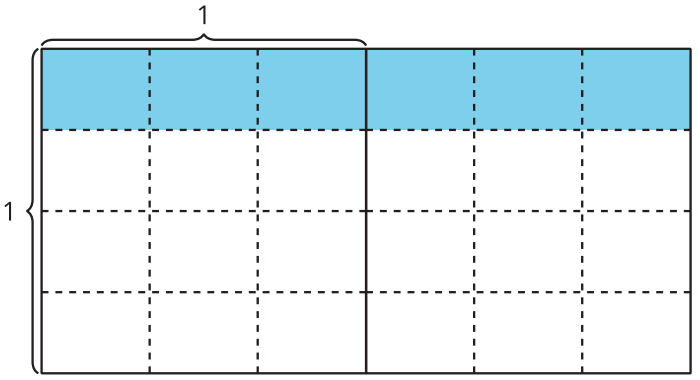
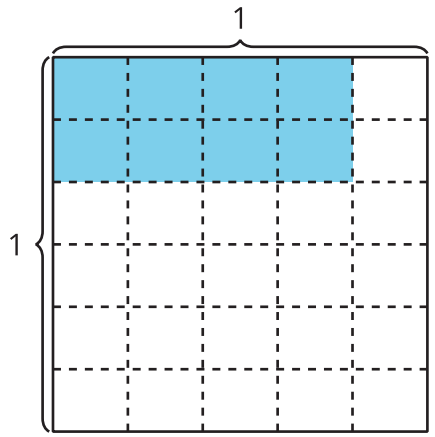


D



6.1: Many Expressions

Explain or show how each expression can represent the area of the shaded region in square units. Be prepared to share your thinking.



1. $\frac{8}{30}$

2. $2 \times 4 \times (\frac{1}{5} \times \frac{1}{6})$

3. $\frac{2}{6} \times \frac{4}{5}$

6.2: More Patterns

1. Complete the table.

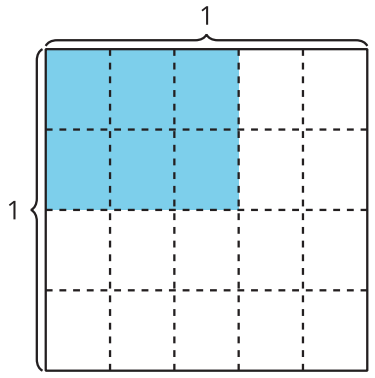
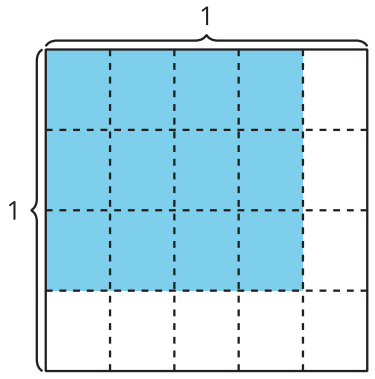
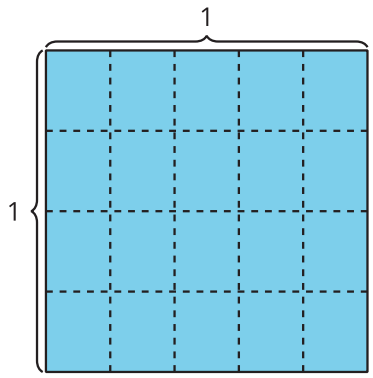
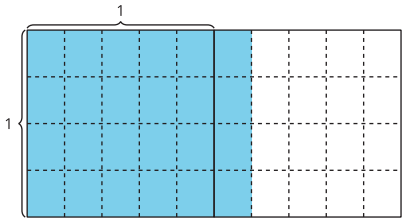
diagram	multiplication expression	shaded area (square units)
A 		
B 		

diagram	multiplication expression	shaded area (square units)
C 		
D 		

2. What patterns do you notice in the table?

3. Explain or show how the expression $\frac{6\times4}{5\times4}$ represents the last diagram in the table.