



# Area and Properties of Operations

Let's write expressions to represent the area of rectangles.

## Warm-up

### Number Talk: Parentheses

Find the value of each expression mentally.

- $5 \times (7 + 4)$

- $(5 \times 7) + (5 \times 4)$

- $(5 \times 7) + (5 \times \frac{1}{4})$

- $(5 \times 7) - (5 \times \frac{1}{4})$



## Activity 1

### Card Sort: Diagrams and Expressions

Your teacher will give you a set of cards.

1. Sort the cards into 2 categories of your choosing. Be ready to explain the meaning of your categories.
2. Match each diagram to an expression. Some diagrams match more than 1 expression.
3. Work with your partner to find the area of each shaded region. Explain or show your reasoning.

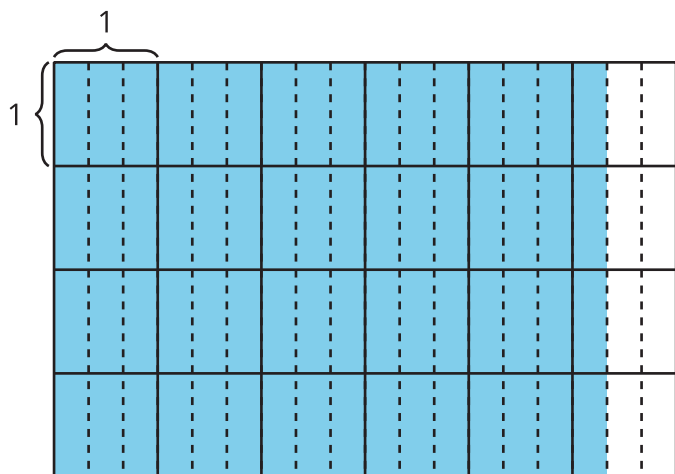


## Activity 2

### Write Expressions

For each diagram, write as many expressions as you can to represent the area of the shaded region in square units.

1.



2.

