## Lesson 13: 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.

* $5×\left(7+4\right)$
* $\left(5×7\right)+\left(5×4\right)$
* $\left(5×7\right)+\left(5×\frac{1}{4}\right)$
* $\left(5×7\right)−\left(5×\frac{1}{4}\right)$

### 13.1: Card Sort: Diagrams and Expressions

Your teacher will give you and your partner a set of cards.

1. Sort the cards in a way that makes sense to you.
2. Match each expression to an appropriate diagram. Some diagrams match more than one expression.
3. Work with your partner to find the area of each shaded region. Explain or show your reasoning.

### 13.2: Write Expressions

Write as many expressions as you can to match the area of the shaded region in each diagram.

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