## Lesson 8: Multiply 2 Two-digit Numbers

- Let's multiply 2 two-digit numbers.


## Warm-up: Number Talk: Extra Groups

Find the value of each expression mentally.

- $20 \times 60$
- $21 \times 60$
- $20 \times 62$
- $19 \times 60$


## 8.1: Two by Two

1. For each diagram, write a multiplication expression that the diagram can represent. Then, find the value of the expression. Use equations to show or explain your reasoning.
a.

b.

c.

2. How are the diagrams alike? How are they different? Discuss with your partner.
3. Use a diagram to find each product.
a. $13 \times 21$
b. $25 \times 46$

## 8.2: Decompose by Place Value

These diagrams could be used to find the value of $49 \times 57$.

Diagram A


Diagram B


1. Which diagram is more helpful when finding the value of $49 \times 57$ ? Why?
2. Use a diagram to find each product.
a. $49 \times 57$
b. $29 \times 55$
