![Illustrative Mathematics logo]

# Unit 2 Lesson 8: Different Ways to Decompose

## WU Number Talk: Multiples of 10 (Warm up)

### Student Task Statement

Find the value of each expression mentally.

- $18 + 10 + 10$
- $18 + 20 + 10$
- $38 - 20$
- $48 - 30$

## 1 Aren't You Missing Something?

### Student Task Statement

Lin and Clare made base-ten diagrams to find the value of $71 - 56$.



1. What do you notice about their work? What do you wonder?

2. Lin and Clare each wrote equations to show their thinking. Explain how you know which group of equations matches Lin's work and which matches Clare's work.

A
$71 - 50 = 21$
$21 = 10 + 11$
$11 - 6 = 5$
$10 + 5 = 15$

B
$71 = 60 + 11$
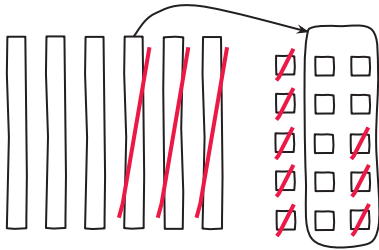$11 - 6 = 5$
$60 - 50 = 10$
$10 + 5 = 15$

3. How are Lin and Clare's methods the same? How are they different?

## 2 Different Ways to Decompose

## Student Task Statement

Andre found the value of $65 - 28$. He made a base-ten diagram and wrote equations to show his thinking.



1. Do you think Andre's method is more like Clare's or Lin's method? Explain.

2. Find the value of each difference. Show your thinking.

    a. $34 - 18$

    b. $82 - 37$

    c. $71 - 53$