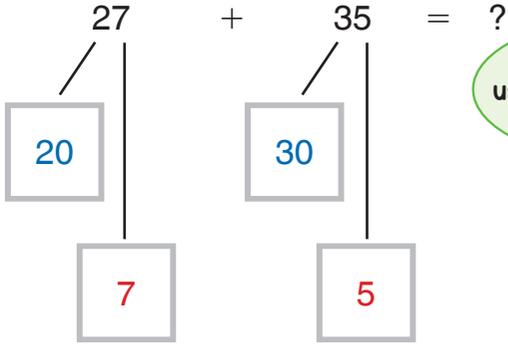


$27 + 35 = ?$

You can use place value to **break apart** numbers into **tens** and **ones**.



I can then use **mental math** to find the sum.



Add the tens.
 $20 + 30 = 50$

Add the ones.
 $7 + 5 = 12$

Then add the sums.
 $50 + 12 = 62$

So, $27 + 35 = 62$.

Think: $50 + 12$

\wedge
 $10\ 2$

$50 + 10 + 2 = 62$



Do You Understand?

Show Me! Explain how you can break apart numbers to find $14 + 32$.

☆ Guided Practice ☆

Break apart numbers to find each sum. Use blocks to help, if needed.

1. $17 + 42 = 59$

A place value chart for 17 + 42 = 59. The number 17 is broken into 10 (tens) and 7 (ones). The number 42 is broken into 40 (tens) and 2 (ones). The sum 59 is shown as 50 + 9.

2. $\square = 53 + 23$

A place value chart for 53 + 23. The number 53 is broken into a tens box and a ones box. The number 23 is broken into a tens box and a ones box. The sum is represented by a tens box and a ones box.

The *Visual Learning Bridge* connects students' thinking in Solve & Share to important math ideas in the lesson. Use the *Visual Learning Bridge* to make these ideas explicit. Also available as a *Visual Learning Animation Plus* at PearsonRealize.com

Model with Math Read the equation aloud. *What does the "?" stand for?* [The sum of 27 and 35] Review the value of each digit in the numbers in the problem. Then explain to students that they can break apart each addend into tens and ones to make it easy to add the numbers mentally. *Where do the blue numbers, 20 and 30, come from?* [20 is the value of the tens digit in 27, and 30 is the value of the tens digit in 35.] *Where do the red numbers, 7 and 5, come from?* [7 is the value of the ones digit in 27, and 5 is the value of the ones digits in 35.]

Read the frame aloud. Help students understand where the numbers in each equation come from, by having them put their fingers on (and identify) the related digits in the original problem as you read each equation. *What is the sum of 27 and 35?* [62] *Does the answer make sense?* [Sample Answer: Yes; 27 is 3 less than 30. So I can think in my head: $30 + 35 = 65$. 65 is 3 more than 62, so the answer makes sense.] Encourage students to always check to make sure their answer makes sense.

Prevent Misconceptions



If needed, build each addend using place-value blocks to model the value of the digits and the break-apart process.

Learn Glossary
Visual Learning Bridge

$27 + 35 = ?$

You can use place value to **break apart** numbers into **tens** and **ones**.

27	+	35	=	?
20		30		
7		5		

I can then use **mental math** to find the sum.

Add the tens.
 $20 + 30 = 50$

Add the ones.
 $7 + 5 = 12$

Then add the sums.
 $50 + 12 = 62$

So, $27 + 35 = 62$.

Think $50 + 12$
 $\quad \quad \wedge$
 $\quad \quad 10 \ 2$
 $50 + 10 + 2 = 62$

Do You Understand? Show Me! Explain how you can break apart numbers to find $14 + 32$.

Sample answer:
Add the tens to get $10 + 30 = 40$. Next, add the ones to get $4 + 2 = 6$. Then add $40 + 6$ to find the sum, 46.

Guided Practice Break apart numbers to find each sum. Use blocks to help, if needed.

1. $17 + 42 = 59$

17	+	42	=	59
10		40		50
7		2		+ 9
				59

2. $76 = 53 + 23$

76	=	53	+	23	
50		20		70	
3		3		+ 6	
				76	

Check students' work.

142 one hundred forty-two
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Topic 3 | Lesson 4

Do You Understand? Show Me! Reasoning After students accurately explain the procedure, ask: *Why is this break-apart strategy helpful?* [Sample answer: By breaking apart the numbers, I can do the addition in my head.] *Why does this break-apart strategy work?* [Sample answer: It works because you are adding the value of each digit (in the addends) to find the sum.]

Coherence In the *Visual Learning Bridge*, students learn how to break apart two-digit numbers into tens and ones to help them add the numbers. Students are provided with structure at first, but they should eventually be able to use this break-apart strategy without being given the number frames. In the next lesson, students will learn a different break-apart strategy. Tell students that they are building a library of strategies that they can use to help them add quickly and accurately.



Ask the following Essential Question: *How can you break apart both addends to find the sum of two 2-digit numbers?* [Sample answer: First, you can use place value to break apart each addend into tens and ones. Then add the tens, and add the ones. Finally, add the results to find the sum.]

Error Intervention: Item 2

If students become confused when isolating tens or ones, then point out that they can cover the ones digit in each number when adding only tens. Likewise, prompt them to cover the tens digit in each number when adding only ones.



Reteaching Assign Reteaching Set D, p. 180.