## Unit 5 Lesson 3: Adding and Subtracting Decimals with Few Non-Zero Digits

### 1 Do the Zeros Matter? (Warm up)

#### Student Task Statement

1. Evaluate mentally: $1.009+0.391$
2. Decide if each equation is true or false. Be prepared to explain your reasoning.
	1. $34.56000=34.56$
	2. $25=25.0$
	3. $2.405=2.45$

### 2 Calculating Sums (Optional)

#### Images for Launch



#### Student Task Statement

1. Andre and Jada drew base-ten diagrams to represent $0.007+0.004$. Andre drew 11 small rectangles. Jada drew only two figures: a square and a small rectangle.
* 
	1. If both students represented the sum correctly, what value does each small rectangle represent? What value does each square represent?
	2. Draw or describe a diagram that could represent the sum $0.008+0.07$.
1. Here are two calculations of $0.2+0.05$. Which is correct? Explain why one is correct and the other is incorrect.
* 
1. Compute each sum. If you get stuck, consider drawing base-ten diagrams to help you.
	1.
	* 
	1. $0.209+0.01$
	2. $10.2+1.1456$

#### Activity Synthesis



### 3 Subtracting Decimals of Different Lengths

#### Images for Launch





#### Student Task Statement

Diego and Noah drew different diagrams to represent $0.4−0.03$. Each rectangle represents 0.1. Each square represents 0.01.

* Diego started by drawing 4 rectangles to represent 0.4. He then replaced 1 rectangle with 10 squares and crossed out 3 squares to represent subtraction of 0.03, leaving 3 rectangles and 7 squares in his diagram.
* 
* Noah started by drawing 4 rectangles to represent 0.4. He then crossed out 3 rectangles to represent the subtraction, leaving 1 rectangle in his diagram.
* 
1. Do you agree that either diagram correctly represents $0.4−0.03$? Discuss your reasoning with a partner.
2. Elena also drew a diagram to represent $0.4−0.03$. She started by drawing 4 rectangles. She then replaced all 4 rectangles with 40 squares and crossed out 3 squares to represent subtraction of 0.03, leaving 37 squares in her diagram. Is her diagram correct? Discuss your reasoning with a partner.
* 
1. Find each difference. Explain or show your reasoning.
	1. $0.3−0.05$
	2. $2.1−0.4$
	3. $1.03−0.06$
	4. $0.02−0.007$

#### Activity Synthesis





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