Learning Target: Identify numbers that are 0.1, 0.01, or 0.001 more or less than a number.

Success Criteria:

- I can find 0.1 more or 0.1 less than a number.
- I can find 0.01 more or 0.01 less than a number.
- I can find 0.001 more or 0.001 less than a number.

Explore and Grow

Model 3.16. Use your model to complete the sentences.

0.1 more than 3.16 is ______. 0.1 less than 3.16 is _____.

0.01 more than 3.16 is ______. 0.01 less than 3.16 is _____.

Reasoning How can you find 0.001 less than 1.925?

Think and Grow: Find More or Less

Example Find 0.1 more and 0.01 less than 1.75.

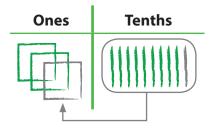
Ones	Tenths	Hundredths

0.1 more than 1.75 is _____.

Ones	Tenths	Hundredths
		×

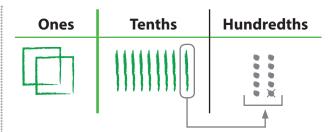
0.01 less than 1.75 is ______.

Example Find 0.1 more and 0.01 less than 2.9.



Regroup 10 tenths as 1 one.

0.1 more than 2.9 is ______.



Regroup 1 tenth as 10 hundredths.

0.01 less than 2.9 is ______.

Show and Grow

- **1.** 0.1 more than 1.26 is ______.
- **2.** 0.1 more than 0.9 is ______.

- **3.** 0.01 less than 4.9 is ______.
- **4.** 0.001 more than 2.518 is ______.

- **17.** The thermometer shows the outside temperature. After an hour, the temperature decreases 0.1°F. What is the temperature now?



- **18.** Which One Doesn't Belong? Which result does *not* belong with the other three?
 - 0.001 more than 2.166
 - 0.01 less than 2.168
 - 0.1 less than 2.267
 - 0.01 more than 2.157

19. Writing Explain how to find 0.001 more than a number that has a 9 in the thousandths place.

Think and Grow: Modeling Real Life

Example You weight three rats for a science experiment. Rat A weighs 8.49 ounces. Rat B is 0.01 ounce heavier than Rat A. Rat C is 0.1 ounce lighter than Rat B. How much does the lightest rat weigh?



Use a place value chart to help you find the weight of each rat.

	Ones	•	Tenths	Hundredths
Rat A				
Rat B		•		
Rat C				

The lightest rat is ______, and it weighs _____ ounces.

Show and Grow

20. Runner A finishes a race in 12.09 seconds. Runner B finishes 0.1 second later than Runner A. Runner C finishes 0.01 second faster than Runner A. What is the winner's time?

21. DIG DEEPER! A baseball player has a batting average of 0.287. His on-base percentage is 0.1 greater than his batting average. His slugging percentage is 0.01 greater than his on-base percentage. What is the player's slugging percentage?

Learning Target: Identify numbers that are 0.1, 0.01, or 0.001 more or less than a number.

Example Find 0.1 more and 0.01 less than 1.34.

Ones	Tenths	Hundredths

0.1 more than 1.34 is _____1.44___.

Ones	Tenths	Hundredths
		×

0.01 less than 1.34 is ____1.33___.

- **1.** 0.1 more than 3.7 is ______.
- **2.** 0.1 less than 2.88 is ______.

- **3.** 0.01 less than 7.21 is ______.
- **4.** 0.01 more than 6.18 is ______.

- **5.** 0.1 less than 9.0 is ______.
- **6.** 0.01 less than 8.08 is ______.
- **7.** 0.1 more than 2.965 is ______.
- **8.** 0.01 more than 7.9 is ______.
- **9.** 0.001 more than 1.228 is ______.
- **10.** 0.001 less than 4.745 is ______.
- **11.** 0.001 more than 5.31 is _____.
- **12.** 0.001 less than 6.521 is ______.

13. 0.001 less than 7.4

0.01 less than 7.4

14. 0.01 more than 5.86

0.1 more than 5.86

15. Structure Complete the sentence represented by the quick sketch.

Ones	Tenths	Hundredths
		×

_ less than ______ is _____.

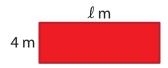
16. YOU BE THE TEACHER Newton says that 0.001 more than 4.9 is 4.91. Is he correct? Explain.

- 17. Modeling Real Life Your friend has \$17.91. Your cousin has \$0.10 more than your friend. You have \$0.01 less than your cousin. How much money do you have?
- **18.** Modeling Real Life The Burmese python at a zoo is 5.09 meters long. The king cobra is 0.01 meter shorter than the python. The green anaconda is 0.1 meter longer than the cobra. How long is the longest snake?

Trivition of the Review & Refresh

Find the unknown measure of the rectangle.

19. Area = 48 square meters



20. Perimeter = 70 inches

20 in. w in.