

Another Example

Order the cockroaches from least to greatest length.

Step 1

Write the numbers, lining up the decimal points. Start at the left. Compare digits of the same place value.

$$\begin{array}{r} 3.576 \\ 3.432 \\ 3.582 \end{array}$$

3.432 is the least.

Step 2

Write the remaining numbers, lining up the decimal points. Start at the left. Compare.

$$\begin{array}{r} 3.576 \\ 3.582 \end{array}$$

3.582 is greater than 3.576.

Step 3

Write the numbers from least to greatest.

$$3.432 \quad 3.576 \quad 3.582$$

From least to greatest lengths are the Oriental, the American, and the Australian.

☆ Guided Practice

Do You Understand?

1. **MP.3 Critique Reasoning**

Scientists measured a Madeira cockroach and found it to be 3.44 centimeters long. Toby says that the Madeira is shorter than the Oriental because 3.44 has fewer digits than 3.438. Is he correct? Explain.

Do You Know How?

For 2–3, write $>$, $<$, or $=$ for each .

2. 2.345 3.509 3. 7.317 7.203

For 4–5, order the decimals from least to greatest.

4. 4.540, 4.631, 4.625

5. 0.575, 1.429, 1.35, 0.593

☆ Independent Practice ☆

For 6–8, compare the two numbers. Write $>$, $<$, or $=$ for each .

6. 0.790 0.79

7. 5.783 4.692

8. 6.717 6.718

For 9–10, order the decimals from greatest to least.

9. 606.314, 606.219, 616.208

10. 234.639, 219.646, 234.630

Math Practices and Problem Solving

11. **MP.3 Critique Reasoning** Explain why it is not reasonable to say that 6.24 is less than 6.231 because 6.24 has fewer digits after the decimal point than 6.231.

12. **Number Sense** Krystal wrote three numbers between 0.63 and 0.64. What numbers could Krystal have written?

13. **A-Z Vocabulary** Write an *equivalent decimal* for each given decimal.

0.85 _____

1.6 _____


2.07 _____

1.02 _____

14. Is 0.6 greater than or less than $\frac{7}{10}$? Draw a number line to show your answer.

15. **Higher Order Thinking** Team Spirit's cheerleading scores were posted on the scoreboard in order from highest to lowest score. One digit in the team's dance score is not visible. List all the possible digits for the missing number.

16. Team Extreme's jumps score is 95.050. How does it compare to Team Spirit's jumps score?



Team Spirit's Scores	
Jumps	95.500
Dance	95._66
Stunts	95.133
Pyramid	94.200

Common Core Assessment

17. A grain of fine sand can have a diameter of 0.120 millimeter. Which numbers are less than 0.120?

- 0.1
- 0.10
- 0.121
- 0.122
- 0.126

18. Kara weighed some oranges at the grocery store. The oranges weighed 4.16 pounds. Which numbers are greater than 4.16?

- 4.15
- 4.19
- 4.2
- 4.24
- 4.26