Visual Learning Animation

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Are the digits in the ones place the same or different? [Same]

Step 2

Find the first place where the digits are different.

3.576
3.432

What is the name of the greatest place value for which the two numbers have different digits? [Tenths]

Prevent Misconceptions

Students sometimes think that they automatically start comparing two numbers by looking at the left-most digit. This would not work for numbers such as 12.5 and 6.37. Emphasize the need to start by comparing the two digits that have the same greatest place value.

Step 3

Compare.

$5 > 4$

Think $0.5 > 0.4$

So, $3.576 > 3.432$.

The American cockroach is longer than the Oriental cockroach.

Is the Australian cockroach or the American cockroach the longest of the three? [Australian] *How do you know?* [The 8 in the hundredths place for the Australian cockroach is greater than the 7 in the hundredths place for the American cockroach.]

Step 1

Line up the decimal points.

Start at the left.

Compare digits of the same place-value.

3.576
3.432

Step 2

Find the first place where the digits are different.

3.576
3.432

Step 3

Compare.

$5 > 4$

Think $0.5 > 0.4$

So, $3.576 > 3.432$.

The American cockroach is longer than the Oriental cockroach.

Independent Practice

Copy and complete. Write >, <, or = for each ◯.

7. 0.890 (=) 0.89 **8.** 5.733 (>) 5.693 **9.** 9.707 (<) 9.717

10. 4.953 (>) 4.951 **11.** 1.403 (>) 1.4 **12.** 3.074 (<) 3.740

Order from least to greatest.

13. 2.912, 2.909, 2.830, 2.841
2.830, 2.841, 2.909, 2.912

14. 8.541, 8.314, 8.598, 8.8
8.314, 8.541, 8.598, 8.8

Order from greatest to least.

15. 5.132, 5.123, 5.312, 5.231
5.312, 5.231, 5.132, 5.123

16. 62.905, 62.833, 62.950, 62.383
62.950, 62.905, 62.833, 62.383

Problem Solving

17. Writing to Explain Why do you need to line up the decimal points before comparing and ordering numbers with decimals?
See margin.

18. Judith wants to buy her mother flowers. Judith earns $4 a week doing chores. If each flower costs $2, how many flowers can Judith buy her mother if she saves for three weeks?
6 flowers

19. There are five types of grains of sand: coarse, very coarse, medium, fine, and very fine. A grain of fine sand can have a diameter of 0.125 millimeters.

Which number is less than 0.125?

A 0.5 **C** 0.13
B 0.2 **D** 0.12

Lesson 1-4 13

17. When you line up the decimal points, then you can easily compare digits of the same place value.

3 Independent Practice

Make sure students read the direction lines for Exercises 13 through 16 carefully, noting that 13 and 14 ask that the numbers be ordered from least to greatest and 15 and 16 ask that the numbers be ordered from greatest to least.

Problem Solving

Exercise	Content
17	Communicate Math Understanding Significance of value determined by place
18	Multiple-Step
19	Compare Decimals Order Decimals

Students use underlying processes and mathematical tools for Exercises 17–19. Remind students to check for reasonableness when solving each problem.

Exercise 18

Problem-Solving Skill: Read and Understand *What information does the problem tell you?* [It tells you how much money Judith earns each week, that she wants to save her money for three weeks, and how much each flower costs.]

Exercise 19

Test-Taking Tip: Make Smart Choices Encourage students to eliminate wrong answers first. *Which two answers could you eliminate right away after looking at the tenths place?* [Answers A and B, because 2 and 5 are both larger than 1]

Early Finishers *Write Exercise 19 values in order from least to greatest.* [0.12, 0.13, 0.2, 0.5]