



Standard Form: 0.000035

The 5 is in the millionths place. Its value is 0.000005.

Expanded Form: $0.00003 + 0.000005$

Word Form: thirty-five millionths

How many tenths are in 1? [10] How many hundredths are in 1? [100] How many thousandths are in 1? [1,000] How many millionths are in 1? [1,000,000] How many hundredths are in one tenth? [10]

Prevent Misconceptions

Students sometimes have difficulty writing a number in expanded form when one of the digits is zero. Suggest that they write zeros for that digit in the expanded form. For example, $1.082 = 1 + 0.0 + 0.08 + 0.002$.



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3 Independent Practice

Remind students that equivalent decimals have the same value. Use Exercise 19 as an example. *How can a decimal equivalent to 8.1 be written?* [Add a zero in the hundredths place.]

Exercise 10

Some students may name the first decimal place as "oneths." Remind them that the place values are powers of 10 times 1 or 1 divided by powers of 10. Point out that both 1×1 and $1 \div 1$ equal 1. So there is not a "oneths" place.

Independent Practice

Write the word form for each number and give the value of the underlined digit. **10–13 See margin.**

10. 2,300 11. 9,00027 12. 1,982 13. 6,000178

Write each number in standard form.

14. two and six hundred thousandths
2.600
15. five and one hundred four millionths
5.000104
16. $3 + 0.3 + 0.009 + 0.0005$
3.3095
17. $7 + 0.6 + 0.05 + 0.007 + 0.0001 + 0.00003$
7.65713

Write two decimals that are equivalent to the given decimal.

Sample answers are given.

18. 2.200 19. 8.1 20. 9.50 21. 4.2000
2.2, 2.20 8.10, 8.100 9.5, 9.500 4.2, 4.20

Problem Solving**Problem Solving**

22. **Writing to Explain** Kay is buying juice at the market. She has \$9 and each bottle of juice costs \$2. Does she have enough money to buy 5 bottles of juice? Explain.
No, 5 bottles would cost \$10. She can only buy 4 bottles of juice.
23. Which point on the number line below best represents 0.368?
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- A W B X C Y **D Z**
24. The Borneo stick insect has a total length, including legs, of 21.5 inches. Write 21.5 in word form.
Twenty-one and five tenths
25. Worker leafcutter ants can measure 0.5 inches. Name two decimals that are equivalent to 0.5.
Sample answers: 0.50, 0.500
26. **Writing to Explain** Why are 7.630 and 7.63000 equivalent?
Sample answer: The seven, six, and three are in the same place in each number. There are zeros in the other places, but they add no value to the number.

Lesson 1-3

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10. two and three hundred thousandths; 3 tenths or 0.3
11. nine and twenty-seven hundred-thousandths; 0.0
12. one and nine hundred eighty-two thousandths; 8 hundredths or 0.08
13. six and one hundred seventy-eight millionths; 7 hundred-thousandths or 0.00007

Exercise	Content
22	Communicate Math Understanding
23	Decimals on a Number Line
24	Standard Form and Word Form
25	Equivalent Decimals
26	Communicate Math Understanding

Students use underlying processes and mathematical tools for Exercises 22–26. Remind students to check for reasonableness when solving each problem.

Exercise 23

Test-Taking Tip: Gather Information Encourage students to gather information from pictures. *What does each tick mark on the number line represent?* [One thousandth, or 0.001]

Exercise 26

Language of Math: Understand Math Symbols Students should recognize decimals that are equivalent. *How does seven and six hundred thirty thousandths differ from seven and sixty-three thousand hundred thousandths?* [There are zeros in two additional decimal places in 7.63000.]

Early Finishers In Exercise 22, how many bottles of juice can Kay buy with her \$9? [Four bottles of juice; she will have \$1 left.]