

3-1 Representing Decimals - Practice and Problem Solving

Write each decimal in word form.

13. 0.9

The digit 9 is in the tenths place.
So, the number is nine tenths.

15. 1.03

The digit 3 is in the hundredths place.
So, the number is one and three hundredths.

17. 4.94

The last digit is in the hundredths place.
So, the number is four and ninety-four hundredths.

19. 0.387

The last digit is in the thousandths place.
So, the number is three hundred eighty-seven thousandths.

21. 20.054

The last digit is in the thousandths place.
So, the number is twenty and fifty-four thousandths.

23. 9.0769

The last digit is in the ten-thousandths place.
So, the number is nine and seven hundred sixty-nine ten-thousandths.

Write each decimal in standard form and in expanded form.

25. eleven and three tenths

Write in standard form.

11.3

Write in expanded form.

$(1 \times 10) + (1 \times 1) + (3 \times 0.1)$

27. thirty-four and sixteen hundredths

Write in standard form.

34.16

Write in expanded form.

$(3 \times 10) + (4 \times 1) + (1 \times 0.1) + (6 \times 0.01)$

Name: School: Grade: Class:

29. one hundred two ten-thousandths

Write in standard form.

0.0102

Write in expanded form.

$$(0 \times 0.1) + (1 \times 0.01) + (0 \times 0.001) + (2 \times 0.0001)$$

31. fifty-two and one hundredth

Write in standard form.

52.01

Write in expanded form.

$$(5 \times 10) + (2 \times 1) + (0 \times 0.1) + (1 \times 0.01)$$

33. **MONEY** When writing a check, it is necessary to write the amount in both standard form and word form. Write \$34.67 in words.

Here, units are dollars and hundredths are cents.

The amount is thirty-four dollars and sixty-seven cents.

35. How is 301.0019 written in word form?

The last digit is in the ten-thousandths place.

So, the number is three hundred one and nineteen ten-thousandths.

37. Write $(4 \times 0.001) + (8 \times 0.0001)$ in standard form.

Write in standard form.

0.0048

CHALLENGE Use the following information.

The digits 3, 9, and 2 make up a decimal number.

39. What is the greatest possible decimal that is greater than 0, but less than 1?

To be greater than 0 but less than one, the number must have a 0 in the ones place. The choices are then 0.392, 0.329, 0.932, 0.923, 0.239, and 0.293. The greatest of these is 0.932.

41. **WRITING MATH** Explain how reading or hearing the word form of a decimal can help you write its standard form.

Sample answer: When you read or hear the word form of a decimal you can use cues to determine how to write the decimal in standard form. For example, when you say three and five tenths, the word and is the cue for where the decimal point goes. Anything before the word and is to the left of the decimal point and anything after the and goes to the right of the decimal point.

43. **SHORT RESPONSE** Write *two hundred eighty-four and twelve hundredths* in standard form.

Write in standard form.

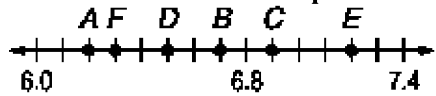
284.12

Name: School: Grade: Class:

- 45. GEOGRAPHY** Jacksonville, Florida, is at sea level. Write this elevation as an integer.

If the city is exactly at sea level, the elevation is neither positive nor negative.
The elevation is 0.

Choose the letter of the point that represents each decimal.



- 47.** 6.3

The number line is scaled in intervals of one-tenth. Count 3 tenths to the right of 6.0. This point is labeled *F*.

- 49.** 6.2

The number line is scaled in intervals of one-tenth. Count 2 tenths to the right of 6.0. This point is labeled *A*.

- 51.** 7.2

The number line is scaled in intervals of one-tenth. Count 2 tenths to the left of 7.4. This point is labeled *E*.