

Decimal Detective

Match tenths and hundredths to decimal notation.

GRADE 4 • 4.NF.C.6

CCSS.Math.Content.4.NF.C.6 "Use decimal notation for fractions with denominators 10 or 100. For example, rewrite 0.62 as $\frac{62}{100}$; describe a length as 0.62 meters; locate 0.62 on a number line diagram."

NAME _____

DATE _____

PLACE VALUE CLUES

A decimal with one digit after the decimal point shows tenths.
A decimal with two digits after the decimal point shows hundredths. Read the digits as the number of tenths or hundredths, then write the matching fraction.

WORKED EXAMPLE

Rewrite 0.47 as a fraction with denominator 100.

1. 47 has two digits after the decimal point.
2. Two digits after the decimal point means hundredths.
3. 47 hundredths is $\frac{47}{100}$.

Answer: $\frac{47}{100}$

PRACTICE 6 problems

- 1** Write 0.6 as a fraction with denominator 10.

ANSWER _____

- 2** Write 0.09 as a fraction with denominator 100.

ANSWER _____

- 3** Write $\frac{34}{100}$ as a decimal.

ANSWER _____

- 4** Write $\frac{7}{10}$ as a decimal.

ANSWER _____

- 5** Fill in the blank: $x/100 = 0.58$

ANSWER _____

- 6** A number line from 0 to 1 is split into 100 equal parts. A point is 23 parts to the right of 0. Write the decimal for the point.

ANSWER _____

APPLY IT Show your work

- 1** A toy robot travels $\frac{65}{100}$ meter during a test. Write this distance in decimal notation.

WORK SPACE

ANSWER _____

- 2** A student measures a sunflower and records its height as 0.45 meter. Write the height as a fraction with denominator 100.

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

On a number line from 0 to 1, a point is halfway between 0.6 and 0.7. Write the point as a decimal and as a fraction with denominator 100. Explain how you know.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Write 0.6 as a fraction with denominator 10.	6/10
2	Write 0.09 as a fraction with denominator 100.	9/100
3	Write 34/100 as a decimal.	0.34
4	Write 7/10 as a decimal.	0.7
5	Fill in the blank: $x/100 = 0.58$	58
6	A number line from 0 to 1 is split into 100 equal parts. A point is 23 parts to the right of 0. Write the decimal for the point.	0.23

PART 2 • APPLY IT

1. **0.65 meter** 65/100 means 65 hundredths. Write 65 in the hundredths place: 0.65.
2. **45/100 meter** 0.45 has two digits after the decimal point, so it shows hundredths. The digits 45 make 45/100.

CHALLENGE

0.65 and 65/100. Halfway between 0.6 and 0.7 is 0.65, which is 65 hundredths.

Accept equivalent decimal forms such as 0.70 for 0.7 when a decimal is requested. When a prompt names a denominator, require that denominator in the fraction answer.