

Decimal Code Breakers

Match tenths and hundredths to decimal notation.

GRADE 4 • MA.4.FR.1.2

MA.4.FR.1.2 "Use decimal notation to represent fractions with denominators of 10 or 100, including mixed numbers and fractions greater than 1, and use fractional notation with denominators of 10 or 100 to represent decimals."

NAME _____

DATE _____

PLACE VALUE MATCH

A fraction with a denominator of 10 shows tenths, so write its numerator in the tenths place. A fraction with a denominator of 100 shows hundredths, so use two places after the decimal point. For a mixed number, write the whole number first, then write the decimal part.

WORKED EXAMPLE

Write $4\frac{6}{10}$ as a decimal.

1. Keep the whole number 4.
2. The fraction $\frac{6}{10}$ means 6 tenths.
3. Write 6 in the tenths place after the decimal point.

Answer: 4.6

PRACTICE 6 problems

1 Write $\frac{83}{100}$ as a decimal.

ANSWER _____

2 Write $\frac{7}{10}$ as a decimal.

ANSWER _____

3 Write $3\frac{25}{100}$ as a decimal.

ANSWER _____

4 Write 1.09 as a mixed number with denominator 100.

ANSWER _____

5 Write 2.8 as a mixed number with denominator 10.

ANSWER _____

6 Write $\frac{145}{100}$ as a decimal.

ANSWER _____

APPLY IT Show your work

- 1** At a robotics contest, Kai's robot traveled $235/100$ meters. Record the distance in decimal notation.

WORK SPACE

ANSWER _____

- 2** A game app uses 1.25 gigabytes of storage. Write this amount as a mixed number with denominator 100.

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A skateboard ramp is 3.08 meters long. Write the length as a mixed number with denominator 100. Then explain why the fractional part is $8/100$, not $8/10$.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Write $83/100$ as a decimal.	0.83
2	Write $7/10$ as a decimal.	0.7
3	Write $3\frac{25}{100}$ as a decimal.	3.25
4	Write 1.09 as a mixed number with denominator 100.	$1\frac{9}{100}$
5	Write 2.8 as a mixed number with denominator 10.	$2\frac{8}{10}$
6	Write $145/100$ as a decimal.	1.45

PART 2 • APPLY IT

1. **2.35** $235/100$ is 2 wholes and 35 hundredths. Write 2.35.
2. **$1\frac{25}{100}$** The decimal part .25 means 25 hundredths. Write $1\frac{25}{100}$.

CHALLENGE

$3\frac{8}{100}$. The 8 is in the hundredths place, so it represents 8 hundredths.

Accept equivalent decimal forms with trailing zeros, such as 0.70 for 0.7. For fractional responses, accept forms with the requested denominator and do not require simplification.