LESSON MAKER PRO

Fraction Decimal Match

Connect fractions, mixed numbers, and decimals.

GRADE 4 · 4.NS.5.b

4.NS.5.b "Identify and model equivalent relationships between fractions (proper or improper) and/or mixed numbers and decimals, using halves, fourths, fifths, tenths, and hundredths.*"

NAME _____ DATE _____

SAME AMOUNT, NEW FORM

A fraction can name the same amount as a decimal. Rename the fraction with tenths or hundredths, then write the number of tenths or hundredths as a decimal.

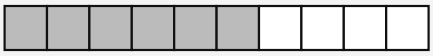
WORKED EXAMPLE

Write 3/5 as a decimal.

One whole



Same whole



1. Rename the fraction with tenths: 3/5 = 6/10.
2. 6/10 means 6 tenths.
3. 6 tenths is 0.6.

Answer: 0.6

PRACTICE 6 problems

1 Write 7/10 as a decimal.

ANSWER _____

2 Write 0.25 as a fraction in simplest form.

ANSWER _____

3 Write 1 1/2 as a decimal.

ANSWER _____

4 Write 9/5 as a mixed number and as a decimal.

ANSWER _____

_____

5 Write 2 3/4 as a decimal.

ANSWER _____

6 Write 0.04 as a fraction with denominator 100.

ANSWER _____

APPLY IT Show your work

1 The video game club meets for 1 3/4 hours. Write the meeting time as a decimal number of hours. Draw two same-size whole-hour bars divided into fourths. Shade the time. Label the shaded amount in fourths, hundredths and decimal form.

2 Leo jogs 0.8 mile after school. What fraction of a mile does he jog? Write the fraction in simplest form.

WORK SPACE

ANSWER

CHALLENGE One step up

Complete the equation, then explain how you know the forms are equal: 2 1/4 = ___/4 = ___/100 = ___.

WORK SPACE AND ANSWER

ANSWER KEY

Fraction Decimal Match

GRADE 4 · 4.NS.5.b

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Write 7/10 as a decimal.	**0.7**
2	Write 0.25 as a fraction in simplest form.	**1/4**
3	Write 1 1/2 as a decimal.	**1.5**
4	Write 9/5 as a mixed number and as a decimal.	**1 4/5; 1.8**
5	Write 2 3/4 as a decimal.	**2.75**
6	Write 0.04 as a fraction with denominator 100.	**4/100**

PART 2 · APPLY IT

1. **One full bar plus three fourths of the second; 7/4 = 175/100 = 1.75 hours.** 3/4 is the same as 75/100, or 0.75. Add 1 and 0.75 to get 1.75 hours. Check two equal whole-hour bars, seven shaded fourths total, and labels 7/4, 175/100, 1.75.
2. **4/5 mile** 0.8 is 8/10. Simplify 8/10 by dividing the numerator and denominator by 2 to get 4/5.

CHALLENGE

2 1/4 = 9/4 = 225/100 = 2.25. I wrote the mixed number as 9 fourths, then multiplied the numerator and denominator by 25 to make hundredths.

Accept equivalent fraction forms when the prompt does not require simplest form or a stated denominator. For the challenge, accept a correct explanation that shows 9/4 is renamed as 225/100 and then written as 2.25.