LESSON MAKER PRO

Decimal Matchups

Connect fractions, decimals, mixed numbers, and models.

GRADE 5 · 5.N.1.4

5.N.1.4 "Recognize and generate equivalent terminating decimals, fractions, mixed numbers, and fractions in various models."

NAME _____ DATE _____

THE BIG IDEA

To write a terminating decimal as a fraction, put its digits over 1 followed by as many zeros as there are digits after the decimal point. Then simplify. To write a fraction as a decimal, divide the numerator by the denominator and add any whole-number part.

WORKED EXAMPLE

Write 0.35 as a fraction in simplest form.

1. There are two digits after the decimal point, so write 35/100.
2. Divide the numerator and denominator by 5: 35/100 = 7/20.

Answer: 7/20

PRACTICE 6 problems

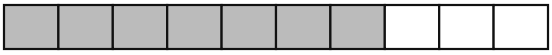
1 Write 0.6 as a fraction in simplest form.

ANSWER _____

2 Write 3/8 as a decimal.

ANSWER _____

3 Write the shaded part as a fraction and a decimal.



ANSWER _____

_____

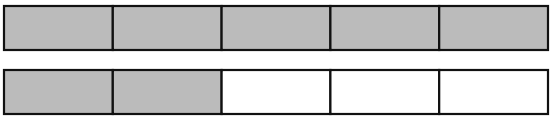
4 Write 1 3/4 as a decimal.

ANSWER _____

5 Write 3.2 as a mixed number in simplest form.

ANSWER _____

6 Write the shaded amount as a mixed number and a decimal.

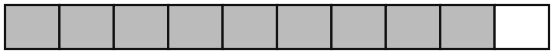


ANSWER _____

_____

APPLY IT Show your work

1 A game shows how much of a level Maya has finished. Write the shaded part as a fraction and a decimal.



ANSWER _____

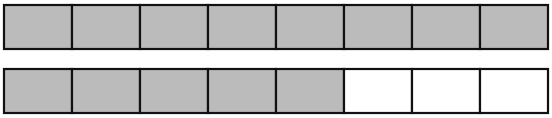
2 Noah's running app shows that he ran 1 1/8 miles. Write his distance as a decimal.

WORK SPACE

ANSWER _____

CHALLENGE One step up

Sofia says the shaded amount is 1.5. Is she correct? Write the correct decimal and explain.



WORK SPACE AND ANSWER

ANSWER KEY

Decimal Matchups

GRADE 5 · 5.N.1.4

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Write 0.6 as a fraction in simplest form.	**3/5**
2	Write 3/8 as a decimal.	**0.375**
3	Write the shaded part as a fraction and a decimal.	**7/10 and 0.7**
4	Write 1 3/4 as a decimal.	**1.75**
5	Write 3.2 as a mixed number in simplest form.	**3 1/5**
6	Write the shaded amount as a mixed number and a decimal.	**1 2/5 and 1.4**

PART 2 · APPLY IT

1. **9/10 and 0.9** Nine of the ten equal parts are shaded, giving 9/10. Nine tenths is 0.9.
2. **1.125 miles** Since 1/8 = 0.125, add the whole mile to get 1.125 miles.

CHALLENGE

No. The model shows 1 5/8. Since 5/8 = 0.625, the shaded amount is 1.625.

Accept equivalent fractions for the model questions. For the challenge, accept explanations that correctly show why 5/8 is 0.625 rather than 0.5.