

Rational Number Remix

Match fractions, decimals, and percentages.

GRADE 6 • MA.6.NSO.3.5

MA.6.NSO.3.5 "Rewrite positive rational numbers in different but equivalent forms including fractions, terminating decimals and percentages."

NAME _____

DATE _____

EQUIVALENT FORMS

A fraction can be written as a decimal by making an equivalent fraction with a denominator of 10, 100, or 1,000, or by dividing. To write a decimal as a percent, multiply by 100 and add %, and to write a percent as a decimal, divide by 100.

WORKED EXAMPLE

Rewrite $11/20$ as a decimal and a percent.

1. Multiply $11/20$ by $5/5$ to make a denominator of 100.
2. $11/20 = 55/100$.
3. $55/100 = 0.55$.
4. $55 \times 100 = 55\%$.

Answer: $11/20 = 0.55 = 55\%$

PRACTICE 6 problems

1 Rewrite $7/20$ as a decimal and a percent.

ANSWER _____

2 Rewrite 0.125 as a fraction in simplest form and a percent.

ANSWER _____

3 Rewrite 45% as a fraction in simplest form and a decimal.

ANSWER _____

4 Rewrite $13/25$ as a decimal and a percent.

ANSWER _____

5 Rewrite 0.72 as a fraction in simplest form and a percent.

ANSWER _____

6 Rewrite $3/4$ as a decimal and a percent.

ANSWER _____

APPLY IT Show your work

- 1** A video game download is 0.875 complete. Write the completed part as a fraction in simplest form and as a percent.

WORK SPACE

ANSWER _____

- 2** In a music club poll, 65% of students chose pop music. Write this amount as a decimal and as a fraction in simplest form.

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A student says that 0.375 is equivalent to 37.5%. Write 0.375 as a fraction in simplest form. Then decide whether the student is correct and explain why.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Rewrite $7/20$ as a decimal and a percent.	$7/20 = 0.35 = 35\%$
2	Rewrite 0.125 as a fraction in simplest form and a percent.	$0.125 = 1/8 = 12.5\%$
3	Rewrite 45% as a fraction in simplest form and a decimal.	$45\% = 9/20 = 0.45$
4	Rewrite $13/25$ as a decimal and a percent.	$13/25 = 0.52 = 52\%$
5	Rewrite 0.72 as a fraction in simplest form and a percent.	$0.72 = 18/25 = 72\%$
6	Rewrite $3/4$ as a decimal and a percent.	$3/4 = 0.75 = 75\%$

PART 2 • APPLY IT

1. **$7/8$ and 87.5%** Write 0.875 as $875/1,000$, then simplify to $7/8$. Multiply 0.875 by 100 to get 87.5% .
2. **0.65 and $13/20$** Divide 65% by 100 to get 0.65 . Write $65/100$ and simplify by dividing by 5 .

CHALLENGE

$0.375 = 3/8$. The student is correct because $0.375 \times 100 = 37.5$, so $0.375 = 37.5\%$.

Accept equivalent fractions only if they are mathematically equal, but require simplest form when the prompt asks for it. Accept decimals with a trailing zero, such as 0.350 , when they are equivalent.