LESSON MAKER PRO

Number Shape Shift

Show the same value in different forms.

GRADE 7 · MA.7.NSO.1

MA.7.NSO.1 "Rewrite numbers in equivalent forms."

NAME _____ DATE _____

ONE VALUE, MANY FORMS

Fractions, decimals, and percents can name the same value. To change a fraction to a decimal, divide the numerator by the denominator or make an equivalent fraction with a denominator of 10, 100, or 1,000. To change a decimal to a percent, multiply by 100 and write the percent sign.

WORKED EXAMPLE

Rewrite 9/25 as a decimal and a percent.

1. Multiply the numerator and denominator by 4.
2. 9/25 = 36/100
3. 36/100 = 0.36
4. Write 0.36 as 36%.

Answer: 0.36, 36%

PRACTICE 6 problems

1 Rewrite 3/8 as a decimal and a percent.

ANSWER _____

2 Rewrite 0.45 as a fraction in simplest form and a percent.

ANSWER _____

3 Rewrite 62% as a decimal and a fraction in simplest form.

ANSWER _____

4 Rewrite -7/10 as a decimal and a percent.

ANSWER _____

5 Rewrite 1 1/4 as a decimal and a percent.

ANSWER _____

6 Rewrite 0.008 as a fraction in simplest form and a percent.

ANSWER _____

APPLY IT Show your work

1 A gaming app shows that you have finished 0.6 of a quest. Write the amount finished as a fraction in simplest form and as a percent.

WORK SPACE

ANSWER _____

2 A hoodie is on sale for 15% off. Write the discount as a decimal and as a fraction in simplest form.

WORK SPACE

ANSWER _____

CHALLENGE One step up

Rewrite 7/16 as a decimal and a percent. Then explain why the percent can have a decimal.

WORK SPACE AND ANSWER

ANSWER KEY

Number Shape Shift

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PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Rewrite 3/8 as a decimal and a percent.	**0.375, 37.5%**
2	Rewrite 0.45 as a fraction in simplest form and a percent.	**9/20, 45%**
3	Rewrite 62% as a decimal and a fraction in simplest form.	**0.62, 31/50**
4	Rewrite -7/10 as a decimal and a percent.	**-0.7, -70%**
5	Rewrite 1 1/4 as a decimal and a percent.	**1.25, 125%**
6	Rewrite 0.008 as a fraction in simplest form and a percent.	**1/125, 0.8%**

PART 2 · APPLY IT

1. **3/5, 60%** Write 0.6 as 6/10, then simplify to 3/5. Move the decimal point two places right to get 60%.
2. **0.15, 3/20** A percent means out of 100, so 15% = 15/100 = 3/20. The decimal form of 15% is 0.15.

CHALLENGE

0.4375, 43.75%. A percent means out of 100, so a percent does not have to be a whole number.

Accept equivalent decimal forms with trailing zeros, such as 0.60 for 0.6. Fractions should be simplified when the problem asks for simplest form.