Lesson 1 Reteach

Decimals and Fractions

> Decimals like 0.58, 0.12, and 0.08 can be written as fractions.
>
> To write a decimal as a fraction, you can follow these steps.
>
> 1. Identify the place value of the last decimal place.
>
> 2. Write the decimal as a fraction using the place value as the denominator, and simplify.

Example 1

Write 0.5 as a fraction in simplest form.

$0.5 = \dfrac{5}{10}$ 0.5 means five tenths.

$= \dfrac{\overset{1}{\cancel{5}}}{\underset{2}{\cancel{10}}}$ Simplify. Divide the numerator and denominator by the GCF, 5.

$= \dfrac{1}{2}$ So, in simplest form, 0.5 is $\dfrac{1}{2}$.

Example 2

Write 0.35 as a fraction in simplest form.

$0.35 = \dfrac{35}{100}$ 0.35 means 35 hundredths.

$= \dfrac{\overset{7}{\cancel{35}}}{\underset{20}{\cancel{100}}}$ Simplify. Divide the numerator and denominator by the GCF, 5.

$= \dfrac{7}{20}$ So, in simplest form, 0.35 is $\dfrac{7}{20}$.

Example 3

Write $\dfrac{3}{5}$ as a decimal.

Since 5 is a factor of 10, write an equivalent fraction with a denominator of 10.

$$\overset{\times 2}{\overbrace{}}$$
$$\dfrac{3}{5} = \dfrac{6}{10} = 0.6$$
$$\underset{\times 2}{\underbrace{}}$$

So, $\dfrac{3}{5} = \dfrac{6}{10}$.

Exercises

Write each decimal as a fraction or mixed number in simplest form.

1. 0.9   **2.** 0.8   **3.** 0.27   **4.** 0.75

5. 0.34   **6.** 0.125   **7.** 0.035   **8.** 0.008

Write each fraction or mixed number as a decimal.

9. $1\dfrac{3}{8}$ **10.** $1\dfrac{5}{8}$ **11.** $3\dfrac{5}{16}$ **12.** $4\dfrac{9}{20}$

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