

Fractions, Decimals, and Percents

To write a fraction as a decimal, you divide the numerator by the denominator.

Write the fraction $\frac{2}{5}$ as a decimal.

STEP 1: Set up the division problem, dividing the numerator by the denominator.

$$\begin{array}{r} 0.4 \\ 5 \overline{)20} \\ \underline{-20} \\ 0 \end{array}$$

STEP 2: Divide as you would with whole numbers.

So, written as a decimal $\frac{2}{5} = 0.4$

Recall that 0.4 is a terminating decimal because it ends after the tenths place.

To write a decimal as a percent, you multiply the decimal by 100 and you add the percent sign

Write 0.34 as a percent

$$0.34 = 0.34 \times 100 = 34\%$$

To write a fraction as a percent, first you convert the fraction into a decimal number then you multiply by 100

Write $\frac{3}{5}$ as a percent

$$\frac{3}{5} = 0.6 = 0.6 \times 100 = 60\%$$

To write a decimal number in a fraction form, you will multiply by multiples of 10 to get rid of all the place values after the decimal points

Write 0.346 as a fraction.

STEP 1: Identify the place value of the last digit in the decimal number.

0.346 → we have three numbers after the decimal point so we will divide by 1000

STEP 2: Use the place value of the last digit as the denominator.

$$0.346 = \frac{0.346 \times 1,000}{1,000} = \frac{346}{1,000}$$

So, $0.346 = \frac{346}{1,000}$

Examples:

A- Complete the table.

Fraction	Decimal	Percent
$\frac{25}{100}$	0.25	25 %
$\frac{66}{100}$	0.66	66 %
$\frac{24}{48}$	0.5	50%