Conversion between Decimals, Fractions, Percentages - Guided Lesson Explanation

Explanation#1

First, write down the decimal "over" the number 1.

$$\frac{0.50}{1}$$

Then multiply numerator and denominator by 10 for every number after the decimal point (10 for 1 number, 100 for 2 number, etc.).

$$\frac{50 \div 5}{100 \div 5} = \frac{10 \div 5}{20 \div 5} = \frac{2}{4}$$

So, the fraction is
$$=\frac{2}{4}$$
.

The easiest way to convert a fraction to a percentage is to divide the numerator by the denominator. Then multiply the result by 100, and add the "%" sign.

First divide 2 by 4:

$$2 \div 4 = 0.50$$

Then multiply by 100:

$$0.75 \times 100 = 50$$

Add the "%" sign: 50%

So the percentage is = 50%

So, the answer is:

Decimal	Fraction	Percentage
0.50	$\frac{2}{4}$	50%

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Explanation#2

Step 1) First we have to see what is being asked.

"Complete the chart. Write everything in the simplest form."

Step 2) The easiest way to convert a fraction to a percentage is to divide the numerator by the denominator. Then multiply the result by 100, and add the "%" sign.

First divide 2 by 8:

$$2 \div 8 = 0.25$$

Then multiply by 100:

$$0.25 \times 100 = 25$$

Add the "%" sign: 25%

So the percentage is = 25%

Step 3) To convert from percent to decimal: divide by 100, and remove the "%" sign.

Step 4) Percent means "per 100", so 25% means 25 per 100, or simply $\frac{25}{100}$

If you divide 25 by 100, you get 0.25 (a decimal number).

So, to convert from percent to decimal: divide by 100, and remove the "%" sign.

Step 6) So the decimal number is = 0.25

So, the answer is:

Decimal	Fraction	Percentage	
0.25	$\frac{2}{8}$	25%	

Explanation#3

Step 1) First we have to see what is being asked.

"Complete the chart. Write everything in the simplest form."

Step 2) To convert from percent to decimal: divide by 100, and remove the "%" sign.

Step 3) Percent means "per 100", so 80% means 80 per 100, or simply $\frac{80}{100}$.

If you divide 80 by 100, you get 0.8 (a decimal number).

So, to convert from percent to decimal: divide by 100, and remove the "%" sign.

So the decimal number is = 0.8

Step 4) For decimal to fraction:

We will write the decimal "over" the number 1.

$$\frac{0.8}{1}$$

Step 5) Then multiply numerator and denominator by 10 for every number after the decimal point (10 for 1 number, 100 for 2 number, etc.).

$$\frac{8 \div 2}{10 \div 2} \qquad \qquad = \qquad \frac{4}{5}$$

Step 6) So the fraction is = $\frac{4}{5}$

So, the answer is:

Decimal	Fraction	Percentage
0.8	4 5	80%