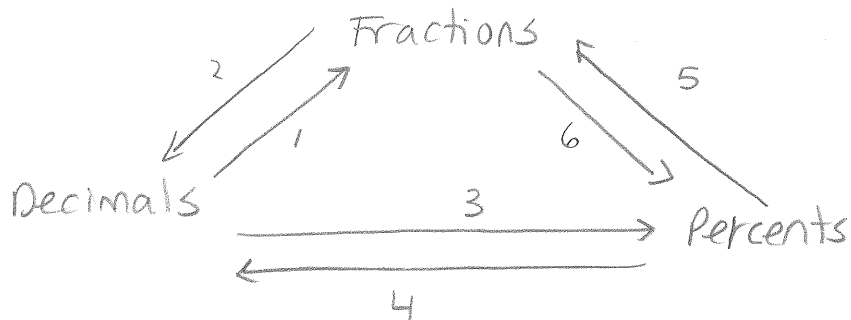


# Memory Aid : Percents

## Converting Between Fractions, Decimals + Percents :



- 1) Read the decimal as place value and you will have the fraction, then reduce

i.e. 0.25 is twenty five hundredths so  $\frac{25}{100} = \frac{1}{4}$

0.4 is four tenths so  $\frac{4}{10} = \frac{2}{5}$

0.375 is three hundred seventy five thousandths so

$$\frac{375}{1000} = \frac{3}{8}$$

- 2) Divide the numerator by the denominator. i.e.  $\frac{3}{8} = 3 \div 8 = 0.375$
- 3) multiply by 100, so move the decimal 2 places to the right  
i.e.  $0.375 \times 100 = 37.5\%$
- 4) Divide by 100, so move the decimal place 2 spaces to the left  
 $37.5\% \div 100 = 0.375$  \*remove the % sign
- 5) write the percent over 100, then reduce
- 6) convert to a decimal, then a percent. \*IF the denominator is a factor of 100, then just make the fraction equivalent with a denominator of 100.

## Finding Percent of a Number:

$$\begin{array}{r} 15\% \text{ of } 60 \\ \downarrow \quad \downarrow \\ = 0.15 \times 60 \\ = 9 \end{array}$$

## Finding Discounts:

Step 1: Find the percent of a Number.

Step 2: Subtract the discount from the original price.

$$\begin{array}{r} 15\% \text{ of } 60 \\ \downarrow \quad \downarrow \\ = 0.15 \times 60 \\ = 9 \end{array} \quad \nearrow \quad 60 - 9 = \$51$$

## Finding Tax:

Step 1: Find the percent of a Number.

Step 2: Add the tax to the price.

$$\begin{array}{r} 14\% \text{ of } 40 \\ \downarrow \quad \downarrow \\ = .14 \times 40 \\ = \$5.60 \end{array} \quad \nearrow \quad \$40 + \$5.60 = \$45.60$$

## Finding 100% of a Number:

If 30% of a number is 27, what is the number?

Step 1: create a proportion (set of equivalent fractions)

Step 2: solve for x

$$\frac{30\%}{27} = \frac{100\%}{x}$$

$$30x = 27(100)$$

$$\frac{30x}{30} = \frac{2700}{30}$$

$$x = 90$$