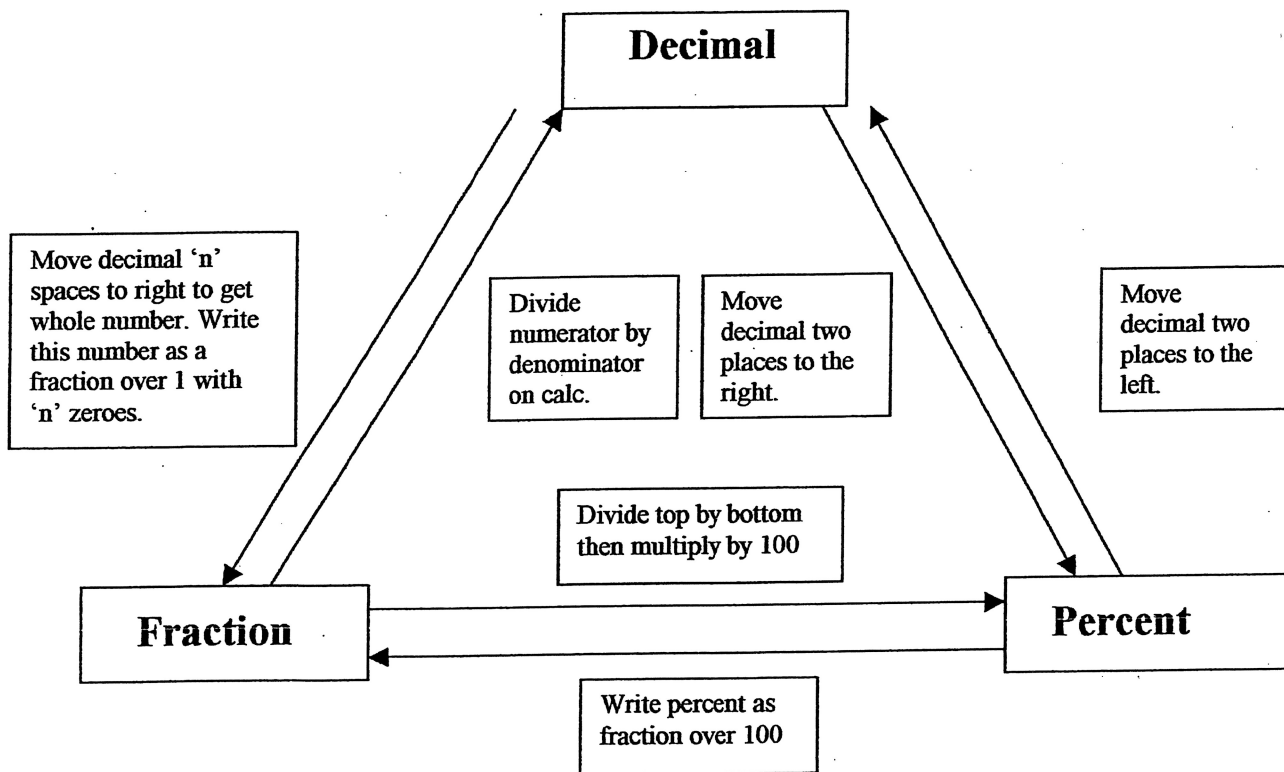


Using Percents, Decimals, and Fractions

Portions of a whole can either be expressed as a percent, a decimal, or a fraction.

1. The following schematic can be used to translate from one form to the other.



2. To calculate the fraction or percentage of some amount, change the fraction or percentage to a decimal and multiply this by the amount.

Ex: 15% (times) \times

a) 15% of 25

$$= \frac{15}{100} \times 25$$
$$= 0.15 \times 25$$
$$= 3.75$$

b) $1/5^{\text{th}}$ of 65

$$= 0.2 \times 65$$
$$= 13$$

Sample Questions

1. Rewrite the following as fractions.

a) 0.42

$$= \frac{42}{100}$$

$$= \frac{21}{50}$$

b) 0.8

$$= \frac{8}{10}$$

$$= \frac{4}{5}$$

c) 82%

$$= \frac{82}{100}$$

$$= \frac{41}{50}$$

2. Rewrite the following as decimals.

a) $\frac{1}{4}$

$$= 0.25$$

b) $\frac{2}{7}$

$$\cong 0.29$$

c) 36%

$$= \frac{36}{100}$$

$$= 0.36$$

0.36

3. Rewrite the following as percents.

a) 0.24

$$= 24\%$$

b) 0.58

$$= 58\%$$

c) $\frac{3}{5}$

$$= 0.6$$

$$= 60\%$$

4. Evaluate the following

a) 78% of 120

$$= 0.78 \times 120$$

$$= 93.6$$

b) $\frac{2}{3}$ rd of 27

$$= 0.\bar{6} \times 27$$

$$= 18$$

or $= \frac{2}{3} \times \frac{27}{1}$

$$= \frac{54}{3}$$

$$= 18$$