Decimals, Percents, and Fractions

Percent (%) means the **number per hundred**.

In a decimal the hundredths place is the second place to the right of the decimal.

In a fraction look at the numerator when the denominator is 100.

Examples:

$$\frac{3}{4} = \frac{75}{100} = 75\% \qquad 0.75 = 75\%$$

Common equivalents to memorize:

$$\frac{1}{1} = \frac{100}{100} = 1.00 = 100\%$$

$$\frac{1}{2} = \frac{50}{100} = 0.50 = 50\%$$

$$\frac{1}{4} = \frac{25}{100} = 0.25 = 25\%$$

$$\frac{3}{4} = \frac{75}{100} = 0.75 = 75\%$$

$$\frac{1}{5} = \frac{20}{100} = 0.20 = 20\%$$

Percentages $>$ 100

Examples:

$$6\frac{3}{4} = \frac{600}{100} + \frac{75}{100} = \frac{675}{100} = 675\% = 6.75$$

$$3\frac{1}{2} = \frac{300}{100} + \frac{50}{100} = \frac{350}{100} = 350\% = 3.50$$

$$4 = \frac{400}{100} = 400\% = 4.00$$

Convert a Decimal to a Percent

Move the decimal point 2 places (worth 100 in place value) **toward the % sign**.

Examples:

.37 = 37% .6 = 60% 3.11 = 311% 4.5 = 450%

Convert a Percent to a Decimal

Move the decimal point 2 places (worth 100 in place value) **away from the % sign**.

Examples:

5% = .05 40% = .40 = .4 117% = 1.17 25% = .25

Convert a Fraction to a Decimal or Percent

Steps:

- Divide the denominator into the numerator.
- Divide to the hundredths place.
- Write remainder as a fraction.
- Convert to a percent.

Examples:

$\frac{4}{5}$ $5\overline{)4.0}$ $0.8 \rightarrow 0.80 = 80\%$

-4.0

0

$\frac{2}{3} = 3\overline{)2.00}$ $.66\frac{2}{3}$ $= 66\frac{2}{3}\%$

-18

20

-18

2

or $.\overline{6}$

Common equivalents to memorize:

$\frac{1}{3} = 33\frac{1}{3}\%$ $\frac{2}{3} = 66\frac{2}{3}\%$ $\frac{1}{8} = 12\frac{1}{2}\%$