

## Converting from Decimals to Fractions

Steps:

- 1) If there is a Whole number, it will stay the same.
- 2) The number after the decimal point will become the numerator.
- 3) The place value of the last digit after the decimal point will become the denominator.
- 4) Simplify if possible

Ex)

b) 1.25

$$\frac{25}{100} \div \frac{25}{25} = \frac{1}{4}$$

b) .333

$$\frac{333}{1000}$$

c) 2.65

$$2 \frac{65}{100} \div \frac{5}{5} = 2 \frac{13}{20}$$

## Converting From Fraction to a Decimal.

- 5) Write your fraction as a long division problem. Put your numerator on the inside and your denominator (divisor) on the outside.
- 6) Add your decimal point behind the number on the inside. Add Zeros when necessary
- 7) Divide Normally
- 8) Stop when you get a terminating or repeating decimal.

Ex)

b)  $\frac{7}{8}$

$$\begin{array}{r} 0.875 \\ 8 \overline{) 7.000} \\ \underline{64} \phantom{00} \\ 60 \phantom{0} \\ \underline{56} \phantom{0} \\ 40 \\ \underline{40} \\ 0 \end{array}$$

b)  $\frac{2}{3}$

$$\begin{array}{r} 0.666 \\ 3 \overline{) 2.00} \\ \underline{18} \phantom{00} \\ 20 \phantom{0} \\ \underline{18} \phantom{0} \\ 20 \\ \underline{18} \\ 2 \end{array}$$

c)  $3 \frac{1}{2}$

$$\frac{7}{2} \quad 2 \overline{) 7.0} \\ \underline{6} \\ 10$$