## Decimals, Fractions \& Percentages



## Fractions

- Numbers that are a ratio of two numbers
$1 / 2=1: 2$ a part of a whole


## Decimals

- Decimals are used for numbers between whole numbers
$\mathrm{pi}=3.14$
0.158


## Decimal to Fraction

- Write: decimal/1
- Multiply the numerator and denominator by 10 for every number after the decimal point
- Simplify (or reduce) the fraction


## Decimal to Fraction

0.4
$\frac{0.4}{1}$
$\frac{0.4}{1} \times \frac{10}{10}$
$\frac{4}{10}$

$$
\begin{array}{|l|}
\hline \frac{2}{5} \\
\hline
\end{array}
$$

0.35
$\frac{0.35}{1}$
$\frac{0.35}{1} \times \frac{100}{100}$
35
$\overline{100}$
$\frac{7}{20}$

## Fraction to Decimal

- Divide the numerator (top number) by the denominator (bottom number)


## Fraction to Decimal



## Percentages

- Percent means per hundred

$$
20 \%=\frac{20}{100}
$$



## Decimal to Percentage

- Move the decimal two places to the right OR
- Multiply the decimal by 100


## Decimal to Percentage

## $\begin{array}{r}\begin{array}{r}0.85 \\ 0.85 \\ \hline\end{array} \\ \hline 85 \% \\ \hline\end{array}$

0.2
0.20
$20 \%$

## Relationship

Question:
How are FRACTIONS, DECIMALS and PERCENTAGES related?

Answer:
They all represent parts of a whole

## Online Activity

- Go to www.khanacademy.org
- Search for:

Representing a number as a decimal, percent and fraction

- Click on the second link
- View the video
- Click on "Practice this concept"

