

# Fractions, Decimals, and Percentage

Know how to express parts of a whole in different ways! Learn how fractions, decimals, and percentages relate to each other.



## Fractions

- represents the ratio of the number of parts to a whole
- used to express portion of foods and describe time (half hour, quarter hour)



numerator →  $\frac{1}{4}$   
denominator →

0.25

↑  
decimal point

## Decimals

- a way to express fractions whose denominator are powers of 10.
- can be seen on currencies, and measuring devices



% OFF

## Percentage

- describes the ratio of a part to a hundred
- often used in telling discounts, and phone battery status

25%

↑  
percent sign

## How to rewrite fractions, decimals, and percentages

Fractions → Decimal → Percentage

[ Divide numerator by denominator ]

[ Multiply by 100, put % ]

$$\frac{2}{5} \xrightarrow{[ 2 \div 5 ]} 0.4 \xrightarrow{[ 0.4 \times 100 ]} 40\%$$

Percentage → Decimal → Fractions

[ Divide by 100, remove the % ]

[ Put the number on the numerator and a power of 10 on the denominator, then simplify ]

$$65\% \xrightarrow{[ 65 \div 100 ]} 0.65 \xrightarrow{\frac{65}{100}} \frac{13}{20}$$

Tip: Count the decimal places. that will be the number of zeroes here!

