

Unit 1: Unit Price and Currency Exchange

Wednesday, June 6, 2018 10:56 AM

1.1: Proportional Reasoning

Be able to:

- Simplify fractions
 - o State a fraction in lowest terms
- Solve for an unknown in an equation containing 2 fractions.

$$\frac{\$12}{2 \text{ burgers}} = \frac{x}{40 \text{ burgers}}$$

$x = \$240$

STEP 1 - Cross multiply
 $40 \times 12 = 480$

STEP 2 - Divide
 $\$480 \div 2 = \240

Proportion

- Use ratios, proportions, and rates to solve problems
 - o Ratio = comparison between two numbers **measured in same units**
 - o Proportion = fractional statement between two ratios (**See above**)
 - o Rate = comparison between two numbers **measured in different units**.

1.2: Unit Price

Be able to:

- Find the price of one item that is sold in large quantities.
 - o Set up a proportion (equivalent fractions)
- Use unit price to find what size of an item is a better deal.
 - o Set up a proportion (equivalent fractions)
- Use a unit price to determine the cost of a larger quantity.
 - o Set up a proportion (equivalent fractions)

1.3: Setting a Price

Be able to:

- Turn a percentage into a decimal
 - o Divide by 100

$15\% \rightarrow 15 \div 100 = 0.15$
(percent) (decimal)

- Calculate the percentage of a certain quantity.
 - o Turn the percent into a decimal, and multiply your total amount.

$15\% \text{ of } \$500$
 \downarrow
 $0.15 \times \$500 = \75

- Calculate what percentage a number is of a total.
 - o Make a ratio of the number over the total, divide and multiply by 100

What percent is 20 out of 500?

$$\frac{20}{500} = 0.04 \times 100 = 4\%$$

- Calculate the percent of a markup
 - o **Markup** = the amount that a dealer will add to the cost of an item
 - Mark up + cost = selling price
 - Mark up will always be a percent of the cost!

- Determine the selling price of an object by adding the markup to the cost of an item
- Calculate taxes and add to the price of an item
 - o Taxes will be a percent of the selling price

1.4: On Sale!

Be able to:

- Determine the amount being saved off an item on sale for a percentage off.
 - o Calculate the percentage
- Determine the sale price of an item by subtracting the percent off.
- Determine discount rate of a sale.
 - o **Discount rate** = the percent being saved from the original price

1.5: Current Exchange Rates

Be able to:

- Determine the exchange rate of currency by using proportional reasoning or unit pricing.
- Know the difference between a selling price and a buying price.
 - o Selling price = the rate that the bank sells currency
 - o Buying price = the rate that the bank buys back currency