1.3: Setting a Price—Notes

In order to make a profit and pay operating costs all businesses must set a price for their products and services to offset these costs.

**Mark up** is the difference between what the business buys the product for and what it is sold for. This is usually calculated as a percentage.

**Example 1**
Julie purchases jeans wholesale for her designer clothing store. She pays $55.00/pair and charges a markup of 45%. What is the selling price?

**Method 1: 2-step process**
- Find percent mark-up and add to original price.
  
  \[
  \frac{55}{100\%} + 45\% = \frac{55}{55}\% + \frac{45}{100}\% = \frac{55 + 45}{100}\% = \frac{100}{100}\% = 1 \text{ or } 100\%
  \]

- Convert % markup to a decimal then multiply.

  \[55 \times 1.45 = \$79.75 \text{ (mark up)}\]

- To find the selling price, add to the original.

  \[\$55 + \$79.75 = \$134.75 \text{ (selling price → before tax)}\]

**Method 2: 1-step process**, include the percent mark-up with original price. Convert % total increase including the original price to a decimal then multiply.

\[100\% + 45\% = 145\% \rightarrow \text{as a decimal} \quad 1.45\]

\[\$55 \times 1.45 = \$79.75 \text{ (selling price)}\]

**Example 2**
Using the example above, Julie was adding a markup of 145% on the same $55.00 pair of jeans.

**Method 1: 2-step process**, find percent mark up and add to original price. Convert % markup to a decimal then multiply.

\[100\% + 145\% = 245\% \rightarrow 2.45\]

\[\$55 \times 2.45 = \$133.75 \text{ (mark up)}\]

To find the selling price, add to the original.

\[\$55 + \$133.75 = \$188.75 \text{ (selling price)}\]

**Method 2: 1-step process**, include the percent mark-up with original price. Convert % total increase including the original price to a decimal then multiply.

\[100\% + 145\% = 245\% \rightarrow 2.45\]

\[55 \times 2.45 = \$134.75 \text{ (selling price)}\]