

Business Mathematics

Class notes

Markup on Selling Price and Perishables (section 8.2)

Markup will be given as a percentage of the selling price, *not* cost.

Markup in these problems will be a percentage of the selling price, *not* cost. That means the “whole” in our percent formula (**Percent = Part / Whole**) will be the selling price. We will use the formula $C + M = S$ as before but our handy little table will now look like the following.

_____	C	_____
_____	M	_____
<hr/>		
100%	S	_____

Again, percents go on left, dollars on right.

expl 1: Solve for the missing numbers. Markup is based on selling price.

65%	C	_____
_____	M	\$527.80
<hr/>		
_____	S	_____

Recall, that S is now considered to be the whole (100%).

Keep in mind that $C + M = S$.

expl 2: Given the cost and selling price of an item below, find the markup (dollar amount). Then calculate the percent markup on cost and the percent markup on selling price.

Cost: \$5.15

Selling price: \$15.45

Keep in mind that
 $C + M = S$.

Percents involve
determining what
the part is and what
the whole is.

Equivalent Markup Percentages on Cost and Selling Price:

We have these two formulas that will help us convert between “markup on cost” and “markup on selling price”.

$$\text{Percent Markup on Selling Price} = \frac{\text{Percent Markup on Cost}}{100\% + \text{Percent Markup on Cost}}$$

$$\text{Percent Markup on Cost} = \frac{\text{Percent Markup on Selling Price}}{100\% - \text{Percent Markup on Selling Price}}$$

If we are given or can find cost, markup,
and selling price, we do *not* need these.
But sometimes we are not...

Use percent or
decimal forms, but
be consistent!

expl 3: Given the percent markup on cost, find the percent markup on selling price. Round to the nearest tenth of a percent.

Percent Markup on Cost: 50%

Which formula do we need?

Selling Price of Perishables:

When it comes to perishables like fruit or bread, we must take into account that some product will *not* be sold and yet we still need to make a certain profit. Experience will tell us how much of the product will be sold and how much will be wasted.

expl 4: The Pizza Shoppe makes and sells lots of pizzas, but finds that 8% of them typically do *not* sell. If they produce 100 pizzas at a cost of \$4.50 each and desire a markup of 70% on selling price, find the selling price per pizza. Follow the steps outlined here.

a.) Find the total cost of 100 pizzas.

b.) Find the selling price (or revenue) they need to get for *all* of the pizzas they make. Make yourself a CMS table like on page 1.

_____	C	_____
_____	M	_____
100%	S	_____

c.) Now, we find the selling price *per pizza*. If they sold all 100 pizzas, we would simply divide this number (part *b*) by 100 and be done. But, alas, they have 8% waste. Divide the selling price from part *b* by the number of pizzas they think they will *actually* sell (which is what?). This is the selling price they should charge for one pizza.