Business Mathematics
Class notes
Series Discounts and Single Discount Equivalents (section 7.2)

What single percent discount is the same as the series discount 10/15/20?

Given a series discount, we will find a single percentage discount that is equal to the series discount. This is called a **Single Discount Equivalent**. This will be the percentage that is actually discounted (subtracted) from the invoice total.

Our procedure is relatively straight-forward.

Procedure for Finding Single Discount Equivalents:

1. Find the net cost equivalent. This is explained in the previous section but remember it is how much of the invoice that is *paid*.

2. Subtract the net cost equivalent from 100% (or, in decimal form, 1) to find the Single Discount Equivalent. This is how much of the invoice that is *not paid* or *discounted (subtracted) from the total*. Record it in percent form.

expl 1: Perform the above procedure to find the Single Discount Equivalent for the series discount 10/15/20. Do *not* round intermediate answers. Leave your answer in percent form, rounded to one decimal place.
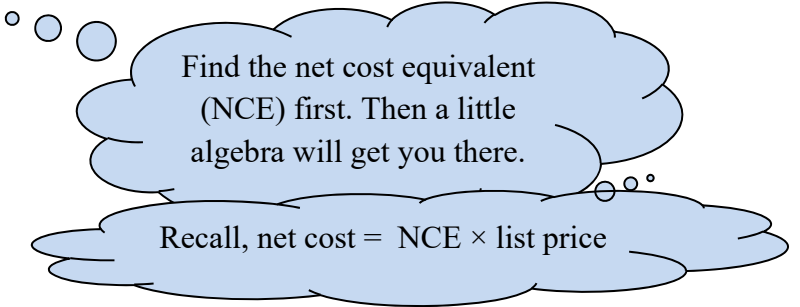
Always use percent signs when appropriate.

In the previous section, we were given the invoice total or list price and a discount, and were asked to find net cost (what they actually paid). Here, we will go the other way. We will be given the net cost and discount and asked to find the list price.

expl 2: Find the list price given the net cost and series discount below.

Net cost: $813.75
Series discount: 30/25

Find the net cost equivalent (NCE) first. Then a little algebra will get you there.

Recall, net cost = NCE × list price

expl 3: Apple offers a 20/10/10 discount to a school district on bulk purchases of new iPads, resulting in a cost of $453.60 per iPad. Find the list price.