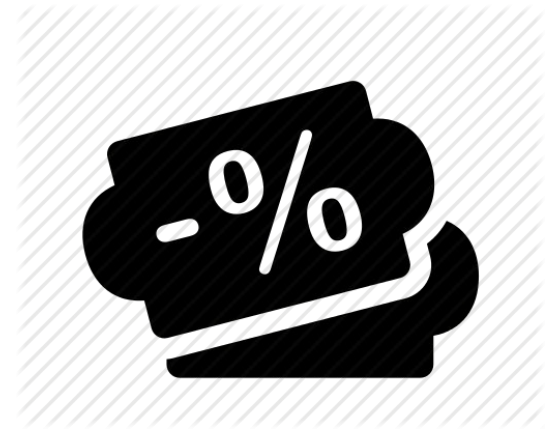


CHAPTER 8 – Trade and Cash Discounts

Mathematics of Buying

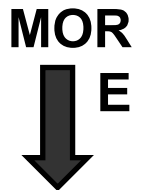
- List Price
- Trade Discounts
- Net Price

- Find the **Trade Discount** using a single trade discount rate, and the **Net Price** using the trade discount.
- Find the **Net Price** using the complement of the single trade discount rate.



- **Suggested retail price, catalog price, list price.**
 - Three common terms for the price at which the manufacturer suggests an item be sold to the consumer.

- **Trade discount**
 - The amount of discount that the wholesaler or retailer receives off the list price, or the difference between the list price and the net price.



■ Net price

The price the manufacturer or retailer pays, or the list price minus the trade discount.

$$\text{Price} = \text{List Price} - \text{Discount}$$

■ The Discount

$$\text{Discount} = \text{List Price} * \text{Discount Rate}$$

■ Discount rate

A percent % of the list price assigned by the Seller.

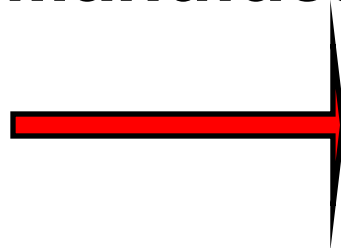
Product and Price Flow

Section 8-1

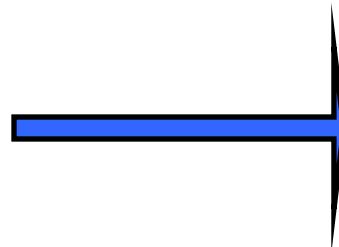
Single Trade Discounts

Consumer List price	→	Retailer Net price	→	Wholesaler Net price	→	Manufacturer Cost
		Discount off list		Discount off list		
\$80		\$56		\$40		\$20
		30% off list		50% off list		

Manufacturer



Wholesaler



Retailer



Consumer

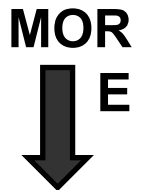
- List prices and discounts apply the percentage formula.
 - The portion is the trade discount P .
 - The base is the list price B .
 - The rate is the single trade discount rate R .

$$P = B * R$$

Portion (part) = rate (percent) * base (whole)

**Identify the single discount rate and the list price.
Multiply the list price by the single discount rate.**

$$\text{Trade discount} = \text{Rate} \times \text{List Price}$$



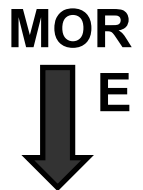
**Identify the single discount rate and the list price.
Multiply the list price by the single discount rate.**

Trade discount = rate x list price

Find the **trade discount** for a cd player that retails at \$120 and has a trade discount rate of 35%.

$$\text{Trade discount} = 0.35 \times \$120$$

$$\text{Trade discount} = \$42$$



- Find the **trade discount** for a rug that lists for \$290 and has a trade discount of 30%.

$$\mathbf{\$290 * 0.30 = \$87}$$

- Find the **trade discount** for styling gel that lists for \$18 and has a trade discount of 15%.

$$\mathbf{\$18 * 0.15 = \$2.70}$$

Calculating Single trade discount method

- 1- Identify the **list price** and the **trade discount**.
- 2- Subtract the trade discount from the list price.

$$\text{Trade discount} = \text{Rate} \times \text{List Price}$$

$$\text{Net Price} = \text{List Price} - \text{Trade discount}$$



Calculating Single trade discount method

- 1- Identify the list price and the trade discount.
- 2- ~~Subtract the trade discount from the list price.~~

$$\text{Trade discount} = \text{Rate} \times \text{List Price}$$


Find the **net price** of a desk that lists for \$320 and has a trade discount of 30%.

$$\text{Net Price} = \text{List Price} - \text{Trade discount}$$

$$\text{Trade discount} = \$320 \times 0.30 = \$96$$

$$\text{Net price} = \text{List price} - \text{Trade discount}$$

$$\text{Net price} = \$320 - \$96 = \mathbf{\$224}$$

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The Complement Method

- Another method for calculating the net price uses the *complement* of a percent.
 - The **complement of a percent** is the difference between 100% and the given percent.
- The complement of the single trade discount rate can be used to find the **net price**.

HOW TO:

- 1- Subtract the single trade discount from 100%.
- 2- Multiply the list price by the complement of the single trade discount.

Examples:

Find the **Net Price** of a coffee maker that lists for \$20 and has a trade discount rate of 20%.

■ Complement of percent

- The difference between 100% and the given percent.

Examples:

The complement of 30% is 70%.

The complement of 55% is 45%

The complement of 5% is 95%.

List price	Discount (amount off list)	Net price (amount paid)
100%	25% of list price	75% of list price
100%	20% of list price	80% of list price
100%	40% of list price	60% of list price
100%	50% of list price	50% of list price

- Find the **net price** of a Laptop that lists for \$1,500 and has a trade discount of 15%.

$$\mathbf{\$1500 * 85\% = \$1275}$$

- Find the **net price** of a bicycle that lists for \$102 and has a trade discount of 30%.

$$\mathbf{\$102 * 70\% = \$71.40}$$



End of a section

Thank you,
Maher Arafat