Section 3 Markdown

Chapter 8

14th Edition Business MATHEMATICS

Gary **Clendenen** Stanley A. **Salzman**



ALWAYS LEARNING

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Objectives

- 1. Define the term *markdown* when applied to selling.
- 2. Calculate markdown, reduced price, and percent of markdown.
- 3. Define the terms associated with loss.
- 4. Determine the break-even point and operating loss.
- 5. Determine the amount of a gross or absolute loss.

Define the term *Markdown* when Applied to Selling

When merchandise does not sell, the price is often **reduced**

Difference between the original selling price and the reduced selling price is called the **markdown**

Selling price after markdown is called the **reduced price, sale price,** or **actual selling price**



Finding Reduced Price

Reduced price = Original price – Markdown



Example 1 (1 of 2)

Dick's Sporting Goods has reduced, or marked down, the price of a home gym. Find the reduced price if the original price was \$2879 and the markdown is 30%.



Example 1 (2 of 2)

The markdown is 30% of \$2879, or $.3 \times $2879 = 863.70 . Find the reduced price as follows.

\$2879.00 - 863.70 \$2015.30

The reduced price is \$2015.30.



The total inventory of coffee mugs at a gift shop has a retail value of \$785. If the mugs were sold at reduced prices that totaled \$530, what is the percent of markdown on the original price?



Example 2 (2 of 2)

First find the amount of the markdown.

\$785 -\$530 \$255

Use the rate formula.

Rate =
$$\frac{\text{Part}}{\text{Base}} = \frac{255}{785} = .3248 = 32.5\%$$

The mugs were sold at a markdown of 32.5%.

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Target offers a child's car seat at a reduced price of \$63 after a 25% markdown from the original price. Find the original price.



Example 3 (2 of 2)

After the 25% markdown, the reduced price of \$63 represents 75% of the original price. The original price, or base, must be found.

$$Base = \frac{Part}{Rate} = \frac{63}{.75} = \$84$$

The original price of the car seat was \$84.



Define Terms Associated with Loss

The **break-even point** is the selling price that just covers the cost of the item plus overhead, which includes rent, utilities, marketing, accounting, etc. A company does not make or lose money on items sold at the break-even point.

A **reduced net profit** occurs when an item is marked down from the original price but is still sold above the break-even point.



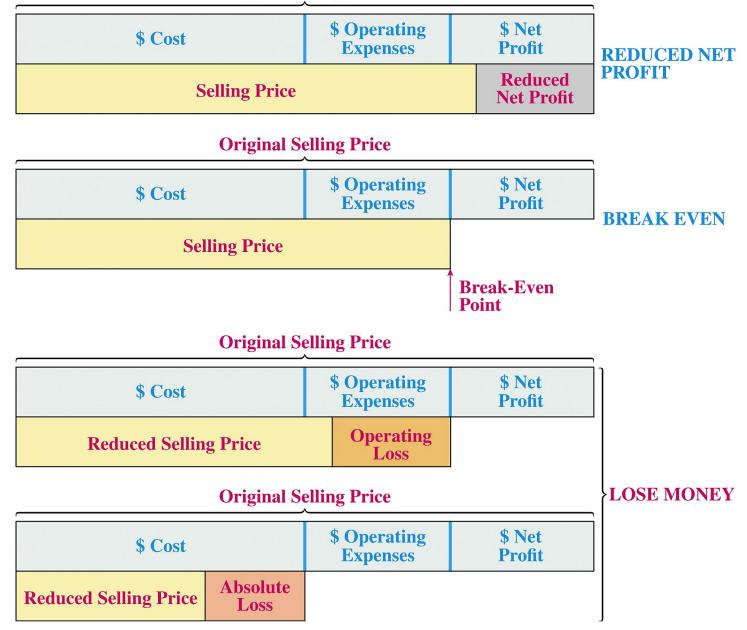
Define Terms Associated with Loss

An **operating loss** occurs when the selling price of an item is below the break-even point but above the cost of the item.

An **absolute loss, or gross loss,** occurs if the selling price is less than the actual cost paid for the item. For example, a firm that buys a pair of slacks for \$38 and then sells the slacks for \$25 has an absolute loss, which is the difference between the two, or \$13.



Original Selling Price





Helpful Formulas

Break-even point = Cost + Operating expenses Operating loss = Break-even point – Reduced selling price Absolute loss = Cost – Reduced selling price



Example 4 (1 of 3)

Appliance Giant paid \$1600 for a 75-inch LCD flat-panel HDTV. If operating expenses are 30% of cost and the television is sold for \$2000, find the amount of profit or loss.

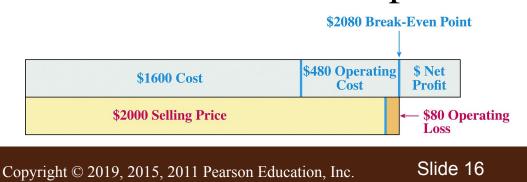


Example 4 (2 of 3)

Operating expenses are 30% of cost.

- Operating expenses = $.30 \times \$1600 = \480
- The break-even point for the LCD HDTV is

Cost + Operating expenses = Break-even point $(.3 \times ...) = = ... = ... = ... = ... = ... = ... =$



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Example 4 (3 of 3)

So, the company makes a profit if the television is sold for more than the \$2080 break-even point or incurs a loss if sold for less. Since the selling price is \$2000, there is a loss, found as follows. \$2080 - \$2000 = \$80

The \$80 loss is an operating loss, since the selling price is less than the break-even point but greater than the cost.



Example 5 (1 of 3)

A ping pong table that normally selling for \$360 at Dick's Sporting Goods is marked down 30%. If the cost of the game table is \$260 and the operating expenses are 20% of cost, find

(a) the operating loss and

(b) the absolute loss.



Example 5 (2 of 3)

(a) Break-even point = Cost + Operating expenses = \$260 + 20% of \$260 = \$312 Reduced price = $$360 - (.3 \times $360)$ = \$360 - \$108 = \$252 Operating loss = \$312 - \$252= \$60



Example 5 (3 of 3)



(b) The absolute or gross loss is the difference between the cost and the reduced price.
\$260 cost - \$252 reduced price = \$8 absolute loss