

**7-7****Study Guide and Intervention****Sales Tax and Discount**

**Sales tax** is a percent of the purchase price and is an amount paid in addition to the purchase price.  
**Discount** is the amount by which the regular price of an item is reduced.

**Example 1** **SOCCER** Find the total price of a \$17.75 soccer ball if the sales tax is 6%.

**Method 1**

First, find the sales tax.

$$6\% \text{ of } \$17.75 = 0.06 \cdot 17.75 \\ \approx 1.07$$

The sales tax is \$1.07.

Next, add the sales tax to the regular price.

$$1.07 + 17.75 = 18.82$$

The total cost of the soccer ball is \$18.82.

**Method 2**

$$100\% + 6\% = 106\% \quad \text{Add the percent of tax to 100\%.$$

The total cost is 106% of the regular price.

$$106\% \text{ of } \$17.75 = 1.06 \cdot 17.75 \\ \approx 18.82$$

**Example 2** **TENNIS** Find the price of a \$69.50 tennis racket that is on sale for 20% off.

First, find the amount of the discount  $d$ .

$$\underbrace{\text{part}} = \underbrace{\text{percent}} \cdot \underbrace{\text{whole}}$$

$$d = 0.2 \cdot 69.50 \quad \text{Use the percent equation.}$$

$$d = 13.90 \quad \text{The discount is \$13.90.}$$

So, the sale price of the tennis racket is \$69.50 - \$13.90 or \$55.60.

**Exercises**

Find the total cost or sale price to the nearest cent.

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|---|---|
| 1. \$22.95 shirt; 7% sales tax <b>\$24.56</b> | 2. \$39.00 jeans; 25% discount <b>\$29.25</b>       |
| 3. \$35 belt; 40% discount <b>\$21</b>        | 4. \$115.48 watch; 6% sales tax <b>\$122.41</b>     |
| 5. \$16.99 book; 5% off <b>\$16.14</b>        | 6. \$349 television; 6.5% sales tax <b>\$371.69</b> |