

# Lesson 6 Reteach

## Sales Tax, Tips, and Markup

**Sales Tax** is a percent of the purchase price and is an amount paid in addition to the purchase price.

**Tip**, or **gratuity**, is a small amount of money in return for service. The amount a store increases the price of an item by is called the **markup**.

### Example 1

**SOC CER** Find the total cost of a \$17.75 soccer ball if the sales tax is 6%.

#### Method 1

First, find the sales tax.

$$\begin{aligned} 6\% \text{ of } \$17.75 &= 0.06 \cdot 17.75 \\ &\approx 1.07 \end{aligned}$$

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.

$$\begin{aligned} 106\% \text{ of } \$17.75 &= 1.06 \cdot 17.75 \\ &\approx 18.82 \end{aligned}$$

### Example 2

**MEAL** A customer wants to leave a 15% tip on a bill for \$18.50 at a restaurant.

#### Method 1 Add tip to regular price.

First, find the tip.

$$\begin{aligned} 15\% \text{ of } \$18.50 &= 0.15 \cdot 18.50 \\ &= 2.78 \end{aligned}$$

Next, add the tip to the bill total.

$$\$18.50 + \$2.78 = \$21.28$$

The total cost of the bill is \$21.28.

#### Method 2 Add the percent of tip to 100%.

$$100\% + 15\% = 115\% \quad \text{Add the percent of tip to 100\%.}$$

The total cost is 115% of the bill.

$$\begin{aligned} 115\% \text{ of } \$18.50 &= 1.15 \cdot 18.50 \\ &= 21.28 \end{aligned}$$

### Exercises

Find the total cost to the nearest cent.

1. \$22.95 shirt, 6% tax  
**\$24.33**

2. \$24 lunch, 15% tip  
**\$27.60**

3. \$10.85 book, 4% tax  
**\$11.28**

4. \$97.55 business breakfast, 18% tip  
**\$115.11**

5. \$59.99 DVD box set, 6.5% tax  
**\$63.89**

6. \$37.65 dinner, 15% tip  
**\$43.30**

# Lesson 6 Skills Practice

## Sales Tax, Tips, and Markup

Find the total cost to the nearest cent.

- |  |   |
|--|---|
| 1. \$49.95 CD player; 5% tax<br><b>\$52.45</b> | 2. \$69 shoes; 6% tax<br><b>\$73.14</b>               |
| 3. \$37 dinner; 15% tip<br><b>\$42.55</b>      | 4. \$2.99 socks; 5.5% markup<br><b>\$3.15</b>         |
| 5. \$115 coat; 7% tax<br><b>\$123.05</b>       | 6. \$15 lunch; 20% tip<br><b>\$18.00</b>              |
| 7. \$299 DVD player; 7% tax<br><b>\$319.93</b> | 8. \$43 shirt; 6% tax<br><b>\$45.58</b>               |
| 9. \$16 haircut; 15% tip<br><b>\$18.40</b>     | 10. \$8.75 breakfast; 15% tip<br><b>\$10.06</b>       |
| 11. \$47 tie; 4.5% markup<br><b>\$49.12</b>    | 12. \$40.80 dinner; 17% tip<br><b>\$47.74</b>         |
| 13. \$52 lunch; 20% tip<br><b>\$62.40</b>      | 14. \$18.99 CD; 6% markup<br><b>\$20.13</b>           |
| 15. \$22 haircut; 20% tip<br><b>\$26.40</b>    | 16. \$128 catered dinners; 18% tip<br><b>\$151.04</b> |