

Lesson 6 Reteach

Sales Tax, Tips, and Markup

$$100\% = 1.0 \quad 106\% = 1.06$$

$$6\% = 0.06$$

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

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

Method 1

First, find the sales tax.

$$6\% \text{ of } \$17.75 = 0.06 \cdot 17.75 = 1.065$$

$$\approx 1.07$$

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

$$100\% + 6\% = 106\%$$

Add the percent of tax to 100%.

The total cost is 106% of the regular price.

$$106\% \text{ of } \$17.75 = 1.06 \cdot 17.75 = 18.815$$

$$\approx 18.82$$

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.

$$15\% \text{ of } \$18.50 = 0.15 \cdot 18.50$$

$$= 2.78$$

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%.

$$100\% + 15\% = 115\%$$

Add the percent of tip to 100%.

The total cost is 115% of the bill.

$$115\% \text{ of } \$18.50 = 1.15 \cdot 18.50$$

$$= 21.28$$

Exercises

Find the total cost to the nearest cent.

1. \$22.95 shirt, 6% tax

① FIND AMOUNT OF TAX

$$\$22.95(0.06) = 1.377$$

② FIND TOTAL COST

$$\$22.95 + \$1.38 = \$24.33$$

① FIND TOTAL PERCENT

$$100\% + 6\% = 106\%$$

② FIND TOTAL COST

$$\$22.95(1.06) = 24.327$$

$$\approx \$24.33$$

2. \$24 lunch, 15% tip

① FIND AMOUNT OF TIP

$$\$24(0.15) = 3.6$$

② FIND TOTAL COST

$$\$24 + \$3.60 = \$27.60$$

① FIND TOTAL PERCENT

$$100\% + 15\% = 115\%$$

② FIND THE TOTAL

$$\$24(1.15) = \$27.60$$

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

① FIND THE AMOUNT OF TAX

$$\$59.99(0.065) = 3.89935$$

$$\approx \$3.90$$

② FIND THE TOTAL AMOUNT

$$\$59.99 + \$3.90 = \$63.89$$

① FIND THE TOTAL TAX

$$100\% + 6.5\% = 106.5\%$$

② FIND THE TOTAL AMOUNT

$$\$59.99(1.065) = 63.88935$$

$$\approx \$63.89$$

6. \$37.65 dinner, 15% tip

Lesson 6 Skills Practice

Sales Tax, Tips, and Markup

Find the total cost to the nearest cent.

1. \$49.95 CD player; 5% tax

2. \$69 shoes; 6% tax

5. \$115 coat; 7% tax

6. \$15 lunch; 20% tip

9. \$16 haircut; 15% tip

10. \$8.75 breakfast; 15% tip

13. \$52 lunch; 20% tip

14. \$18.99 CD; 6% markup

15. \$22 haircut; 20% tip

16. \$128 catered dinners; 18% tip