

## 5.3 Property Tax

- ▶ Calculate a property tax.
- ▶ Analyze assessments and tax credits.
- ▶ Analyze exemptions for property tax.

### Calculating a Property Tax

In the United States, a **property tax** (or *millage tax*) is a tax levied by city and county governments on real and personal property to generate operating revenues to pay for such public services as schools and emergency services.

Property tax codes vary by state, county, and city. Here are some common characteristics of property taxes.

- Property taxes are generally assessed on land, buildings, and homes, not on other forms of real property, such as jewelry or boats.
- Property taxes are often expressed in **mills** but can also be expressed as percents.
- Market value is an estimate of the price for which a home could sell. **Assessed value** is a percent (called the assessment level) of a property's market value. Property tax is calculated on assessed value.

$$\boxed{\text{Property tax}} = \boxed{\text{Tax rate (decimal form)}} \times \underbrace{\boxed{\text{Assessment level (decimal form)}} \times \boxed{\text{Market value}}}_{\text{Assessed value}}$$

### Study Tip

Remember that a milliliter is  $\frac{1}{1000}$  of a liter. To change a mill to decimal form, divide by 1000.

### Writing a Tax Rate in Decimal Form

A tax rate of 1 mill means \$1 of taxes per \$1000 of assessed value. To change a tax rate to decimal form, divide by 1000.

$$\text{Example: } 235 \text{ mills} = \frac{235}{1000} = 0.235 \text{ (decimal form)}$$

### EXAMPLE 1 Calculating a Property Tax

There are huge differences in property tax rates throughout the United States. Find the property tax for a \$500,000 home in each city.

- a. Bridgeport, CT: Tax rate: 38.7 mills, Assessment level: 70%
- b. Cheyenne, WY: Tax rate: 71 mills, Assessment level: 9.5%

### SOLUTION

- a. Property tax =  $0.0387(0.70)(500,000) = \$13,545.00$
- b. Property tax =  $0.071(0.095)(500,000) = \$3372.50$

### ✓ Checkpoint

Help at [Math.andYOU.com](http://Math.andYOU.com)

Find the property tax for a \$400,000 home in each city.

- c. Denver, CO: Tax rate: 6.8 mills, Assessment level: 8%
- d. Manchester, NH: Tax rate: 17.4 mills, Assessment level: 100%

