

CHAPTER 26**Math Review for Accounting****Interest**

Money deposited in a savings account earns interest. If you borrow money from a bank, you must pay interest.

The amount of **interest (I)** depends on the following.

- the **principal (p)**—the money deposited or borrowed
- the **rate (r)**—a percent per year
- the **time (t)**—given in years

$$\frac{\text{interest}}{I} = \frac{\text{principal}}{p} \times \frac{\text{rate}}{r} \times \frac{\text{time}}{t}$$

Chuck deposits \$200 in a bank that pays 7% interest per year. In $2\frac{1}{2}$ years, how much interest does Chuck's money earn?

$$I = p \times r \times t$$

$$I = \$200 \times 0.07 \times 2.5$$

$$I = \$35$$

Chuck's money earns \$35 interest.

Find the interest earned on each deposit.

1. principal: \$500
annual rate: $7\frac{1}{4}\%$
time: 1 year

2. principal: \$7,000
annual rate: 8%
time: 3 years

3. principal: \$492
annual rate: 7%
time: 3 months

4. principal: \$900
annual rate: $4\frac{1}{4}\%$
time: 1 year

5. principal: \$160
annual rate: $5\frac{1}{2}\%$
time: 15 months

6. principal: \$1,800
annual rate: $6\frac{1}{2}\%$
time: 2 years

7. principal: \$350
annual rate: 6%
time: 6 months

8. principal: \$7,050
annual rate: 6%
time: 3 months

9. principal: \$3,500
annual rate: 10%
time: 5 years

Solve.

10. Gregg opens a savings account with \$175.50. His money earns 8% interest annually. How much interest will he earn in $2\frac{1}{2}$ years?

11. Tony deposits \$750 in a bank that pays $6\frac{1}{2}\%$ annual interest. How much money will Tony have in his account after 3 years?