

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?

$$\begin{aligned} I &= p \times r \times t \\ I &= \$200 \times 0.07 \times 2.5 \\ I &= \$35 \\ \text{Chuck's money} &\text{earns \$35 interest.} \end{aligned}$$

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?