

HOLT ALGEBRA 1: 2.9 APPLICATIONS OF PERCENTS

commission: _____

$$\begin{aligned} \text{total pay} &= \text{base salary} + \text{commission} \\ &= \text{base salary} + \% \text{ of total sales} \end{aligned}$$

Example 1: Business Application (round to the nearest hundredth)

- A. A telemarketer earns \$425 per week, plus a 10% commission on sales. Find her total pay for a week in which her sales are \$880.
- B. A salesman has a sales total of \$2000 for the week. If his base salary is \$320 per week and he gets a 16% commission, find his total pay.
- C. A ticket vendor earns \$200 per week, and this week had \$790 of total sales. If her commission is 15%, find her total pay.

interest: _____

principal: _____

simple interest: _____

Simple Interest Paid Annually

$$\begin{array}{c} \text{Simple interest} \rightarrow I = Prt \leftarrow \text{Time in years} \\ \quad \quad \quad \uparrow \quad \quad \quad \uparrow \\ \quad \quad \quad \text{Principal} \quad \text{Interest rate per} \\ \quad \quad \quad \quad \quad \quad \text{year as a decimal} \end{array}$$

Example 2: Finance Application

- A. Find the simple interest paid annually for 3 years on a \$1500 loan at 20% a year.

B. After 6 months, the annual simple interest on an investment of \$3000 was \$80. Find the interest rate.

C. Find the simple interest paid annually for 3 months on an investment of \$2600 at 5.9% interest annually.

D. After 7 years, the annual simple interest on an investment of \$495 was \$82. Find the interest rate.

tip: _____

sales tax: _____

Hint: Find 1% of a number by moving the decimal _____ places to the _____

Find 10% of a number by moving the decimal _____ places to the _____

Example 3: Estimating with Percents

A. The dinner check for Molly's family is \$40.30. Estimate a 16% tip.

B. The sales tax rate is 7.30%. Estimate the sales tax on pants that cost \$29.76.

C. The lunch check for Ginger's family is \$68.50. Estimate a 20% tip.