

# Lesson 8 Homework Practice

## Financial Literacy

Find the simple interest earned to the nearest cent for each principal, interest rate, and time.

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|--|---|---|
| 1. \$750, 7%, 3 years<br><b>\$157.50</b><br><i>TOTAL DUE \$907.50</i>                    | 2. \$1,200, 3.5%, 2 years<br><b>\$84.00</b><br><i>TOTAL DUE \$1,284</i> | 3. \$450, 5%, 4 months $\leftarrow \frac{1}{3}$ (APPROX 0.33)<br><b>\$7.50</b><br><i>TOTAL DUE \$457.50</i> |
| 4. \$1,000, 2%, 9 months $\leftarrow 0.75$<br><b>\$15.00</b><br><i>TOTAL DUE \$1,015</i> | 5. \$530, 6%, 1 year<br><b>\$31.80</b><br><i>TOTAL DUE \$561.80</i>     | 6. \$600, 8%, 1 month $\leftarrow \frac{1}{12}$ (APPROX 0.083)<br><b>\$4.00</b><br><i>TOTAL DUE \$604</i>   |

Find the simple interest paid to the nearest cent for each loan, interest rate, and time.

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|--|---|--|
| 7. \$668, 5%, 2 years<br><b>\$66.80</b><br><i>TOTAL DUE \$734.80</i>                   | 8. \$720, 4.25%, 3 months $\leftarrow 0.25$<br><b>\$7.65</b><br><i>TOTAL DUE \$727.65</i> | 9. \$2,500, 6.9%, 6 months $\leftarrow 0.5$<br><b>\$86.25</b><br><i>TOTAL DUE \$2,586.25</i> |
| 10. \$500, 12%, 18 months $\leftarrow 1.2$<br><b>\$90.00</b><br><i>TOTAL DUE \$590</i> | 11. \$300, 9%, 3 years<br><b>\$81.00</b><br><i>TOTAL DUE \$381</i>                        | 12. \$2,000, 20%, 1 year<br><b>\$400.00</b><br><i>TOTAL DUE \$2,400</i>                      |
13. **ELECTRONICS** Rita charged \$126 for a DVD player at an interest rate of 15.9%. How much will Rita have to pay after 2 months if she makes no payments?  $\leftarrow \frac{1}{6}$  (APPROX 0.17) **\$129.34**

14. **VACATION** The average cost for a vacation is \$1,050. If a family borrows money for the vacation at an interest rate of 11.9% for 6 months, what is the total cost of the vacation including the interest on the loan? **\$1,112.48**

$$1050(0.119)(0.5) = \$62.48 \text{ INTEREST}$$

15. **INVESTMENTS** Serena has \$2,500 to invest in a CD (certificate of deposit).

- If Serena invests the \$2,500 in the CD that yields 4% interest, what will the CD be worth after 2 years? **\$2,700**
- Serena would like to have \$3,000 altogether. If the interest rate is 5%, in how many years will she have \$3,000? **4 years**
- Suppose Serena invests the \$2,500 for 3 years and earns \$255. What was the rate of interest? **3.4%**

$$2500(0.05) = 125$$

*\$125 INTEREST PER YEAR.*

*SHE NEEDS TO EARN \$500*

$$(\$3,000 - \$2,500)$$

$$\frac{500}{125} = 4 \text{ YEARS}$$

$$255 = 2500(x)(3)$$

$$\frac{255}{7500} = \frac{7500(x)}{7500}$$

$$0.034 = x$$