Name _____ Date _____

Simple Interest: What Savers Earn and Borrowers Pay

Directions: Use simple interest = principal × rate × time, writing the rate as a decimal and the time in years before you multiply. When you type a number answer, leave out any dollar signs or percent signs.

Four Accounts and Loans

Savings accounts and loans belonging to four people, each using simple interest figured on the starting principal only. Each loan is repaid in one payment at the end of its time, and no money is added or withdrawn along the way.

Name	Account or loan	Principal (dollars)	Yearly interest rate	Length of time
Nadia	Savings account	1,200	3%	4 years
Luis	Savings account	750	4%	18 months
Grace	Loan	2,000	6%	3 years
Theo	Loan	3,000	8%	6 months

1. Using the simple interest formula, how much interest does Nadia's savings account earn over its 4 years?

_____ dollars

2. What will Nadia's account balance be at the end of the 4 years, including her principal and all the interest she earned? Type your answer without a comma.

_____ dollars

3. Keeping in mind that Luis's time is given in months while his interest rate is yearly, how much interest does his account earn over the 18 months?

_____ dollars

4. If Theo repays his loan in a single payment after 6 months, how much is that payment, including interest? Type your answer without a comma.

_____ dollars

5. Over the 3 years before Grace repays her loan, how much interest will she pay altogether?

_____ dollars

6. Looking at just the third year of Nadia's savings account, not the first two, how much interest does it earn in that one year?

_____ dollars

7. Match each simple interest word with the meaning it has when people save or borrow money.

Write the letter of the matching answer on each line.

1. _____ Principal
2. _____ Interest
3. _____ Interest rate
4. _____ Term

Choices for question 7

A. A percent, usually quoted per year, that sets how much interest builds up

B. The starting sum that a saver deposits or a borrower receives

C. A fee charged for opening a new account

D. The stretch of time before savings are withdrawn or a loan is repaid

E. Money paid for using money, earned by a saver or paid by a borrower

8. Ivy deposited $500 in an account paying simple interest, and after 3 years it had earned $60 in interest. What yearly interest rate did the account pay?

_____ percent

9. Jordan needs to borrow $1,500 and will repay it in one payment at the end. Offer 1 charges simple interest at a rate of 6% a year for 2 years, while Offer 2 charges simple interest at a rate of 5% a year for 3 years. Which offer costs less in total interest, and by how much?

A. The two offers cost exactly the same amount

B. Offer 2, by $15

C. Offer 1, by $45

D. Offer 2, by $45

10. Which two changes would make Luis's account earn more simple interest over the same 18 months, given that its interest is figured on his starting principal only?

☐ A. A lower yearly interest rate

☐ B. A higher yearly interest rate

☐ C. Withdrawing part of the principal early

☐ D. Leaving each interest payment in the account

☐ E. A larger starting principal