Name _____ Date _____

Loans: Principal, Interest and Term

Directions: For the calculations, compare Dana's two loan offers using the simple interest rule described in the table's caption. Whenever an answer is a number, type the digits only, without a dollar sign, a percent sign or a comma.

1. Loan agreements and financing documents rely on each of these terms; match every term with the description that fits it.

Write the letter of the matching answer on each line.

1. _____ Principal
2. _____ Interest
3. _____ Term
4. _____ Down payment

Choices for question 1

A. The borrowed sum itself, apart from any interest charged on it

B. Cash put toward a purchase at the start, which shrinks the amount of the loan

C. The span of months or years set for paying the loan back in full

D. What a lender charges for the use of its money, owed on top of the sum borrowed

E. A penalty charged for paying off a loan early

Dana's Two Loan Offers

Two loan offers Dana is comparing to borrow $6,000 for a used car. In this example, each loan's interest is worked out up front with the simple interest formula on the full $6,000 for the whole term, and Dana repays that interest plus the $6,000 in equal monthly payments; many real loans instead calculate interest on the shrinking balance, so their payments and totals differ.

Loan detail	Offer A	Offer B
Amount borrowed (dollars)	6,000	6,000
Yearly simple interest rate	5%	5%
Term	2 years, or 24 monthly payments	4 years, or 48 monthly payments

2. Applying the simple interest rule described in the caption, how much total interest will Dana pay over Offer A's complete two-year term?

_____ dollars

3. If Dana repays Offer A's total interest together with the $6,000 she borrowed in 24 equal monthly payments, how much is each payment?

_____ dollars

4. Using the interest rule from the caption, how much total interest would Dana owe across Offer B's entire four-year term? Type your answer without a comma.

_____ dollars

5. Under Offer B, Dana would repay the total interest together with the $6,000 she borrowed in 48 equal monthly payments; how much would each payment be?

_____ dollars

6. Considering everything Dana would repay over each loan's full term, including the amount borrowed, which offer costs her less in total, and by how much?

A. Offer B, because its monthly payment is $125 lower

B. Offer A, by $125

C. The two offers cost the same, because both charge 5%

D. Offer A, by $600

7. Because both offers charge the identical 5% rate, what does comparing them reveal about how the length of a loan's term affects borrowing?

A. A longer term always costs less in total, because each payment is smaller.

B. A shorter term usually means both a higher total cost and a higher monthly payment.

C. A longer term usually means a lower monthly payment but more total interest.

D. The term changes the monthly payment but never the total interest.

8. Suppose Dana makes a $1,200 down payment and borrows the remaining $4,800 under Offer B's conditions of 5% interest for 4 years; what would her monthly payment be?

_____ dollars