Name_____ Date_____

Aim: How do we find simple interest?

Do Now:

Jane wants to borrow $1500 from her parents. They agree to lend her the money provided she pay a "rental fee" of 6% of the amount borrowed for each year that she keeps the money. Jane repays her parents after $2\frac{1}{2}$ years.

a) How much did it cost Jane to borrow the money from her parents?

b) How much did she repay her parents in total?

VOCABULARY

1) _____

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2) _____

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3) _____

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4) _____

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5) _____

6) **Formula:** _____

1) A person puts $2500 into a savings account that earns 5 % interest per year for 3 years. Find the amount of interest earned on the account. How much is in the account at the end of the 3 years?

2) Find the interest earned on an account if you deposit $3000 at an annual rate of 4.5% for 4 years.

3) $9575 was borrowed for 2 years at a cost of $550. What was the rate of interest?

4) You have a summer job as a delivery person at a local grocery store. Suppose you save $1400 of your pay and deposit into an account that earns simple interest. After **9 months** the balance is $1421. What is the annual interest rate?

5) $8500 was borrowed at 12% per year for 3 months. What is the interest and how much was paid back at the end of the 3 months?

6) You have the option of purchasing a car for $26,492 paying cash in full or financing it at 2.9% for 3 years and only paying $23,400 for the car. Which is a better deal? Explain.

CHALLENGE:

Critical Thinking 7) Three months ago you deposited $250 into a savings account, and now your balance is $253. Eight months ago your friend deposited $250 into a different savings account, and her balance is now $257.50. Which account has the greater simple annual interest rate?

Challenge 8) Suppose you put $500 in a savings account that earns 4.5% simple annual interest, and your friend puts $400 in a savings account that earns 6% simple annual interest. Which of you will earn $600 first?