Name: _____

Math 123
Fall 2023
Dr. Lily Yen

Assignment 4
Show all your work

Number: _____
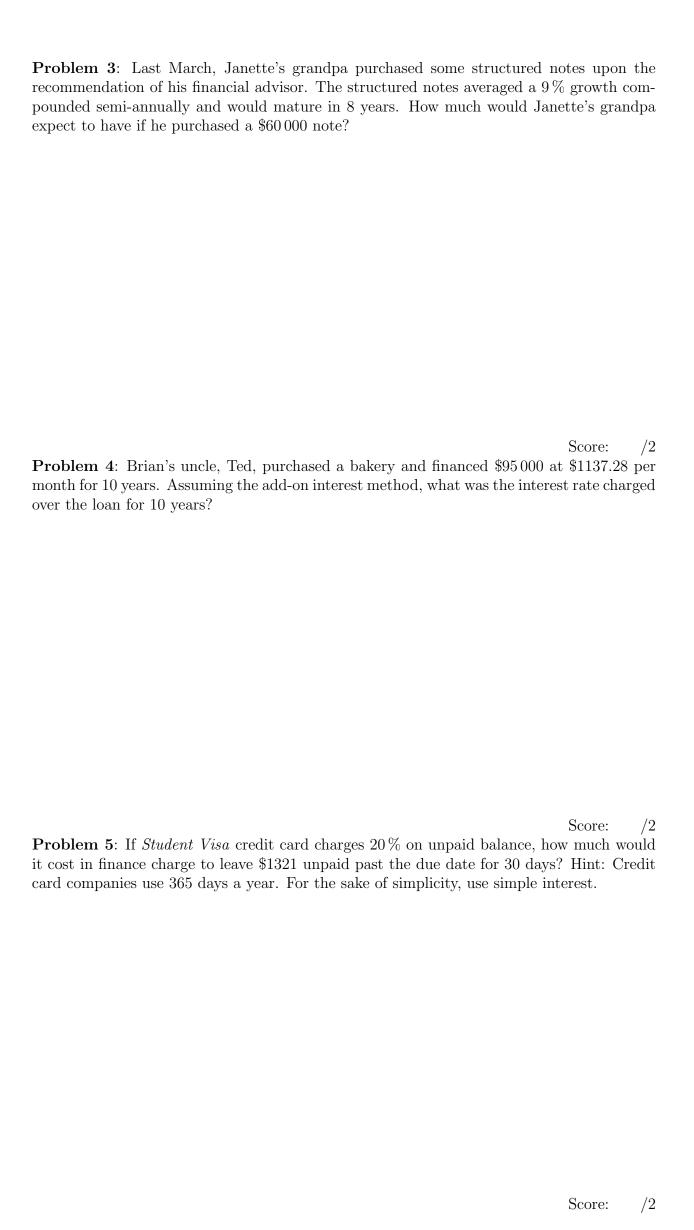
Signature: _____

Score: ___/17

Problem 1: Answer the questions. Write out steps for each. One mark per part except the last part is two marks.

a. Convert the fraction *four and three fifths* into a percent.

b. Find 88% of 350.

c. Brian wants to share 11 popsicles out of a box of 25 with his friends. What percentage of his box of popsicles does he want to share?

d. If Janette finds in her closet 10% of her shoes are Hunters rubber boots, and she counts 2 pairs of Hunters, how many pairs of shoes does she have in her closet?

e. David's family attended a concert in the Orpheum in October this year. For the family dinner before Wynton Marsalis's concert, David's father paid \$32 local service tax, which is a 12% tax in BC. What was the dollar amount for just their food cost before tip and taxes?

Score: /6

Problem 2: Solve for the indicated variable.

a. Solve for n in $m = \frac{P+I}{n}$

b. Solve for x in $(5)^x = 456$. Provide accuracy to two decimal places.

c. Solve for m in $A = P(1 + r/m)^{15}$

Score: /5

Problem 3: Last March, Janette's grandpa purchased some structured notes upon the recommendation of his financial advisor. The structured notes averaged a 9 % growth compounded semi-annually and would mature in 8 years. How much would Janette's grandpa expect to have if he purchased a $60 000 note?

Score: /2

Problem 4: Brian's uncle, Ted, purchased a bakery and financed $95 000 at $1137.28 per month for 10 years. Assuming the add-on interest method, what was the interest rate charged over the loan for 10 years?

Score: /2

Problem 5: If *Student Visa* credit card charges 20 % on unpaid balance, how much would it cost in finance charge to leave $1321 unpaid past the due date for 30 days? Hint: Credit card companies use 365 days a year. For the sake of simplicity, use simple interest.

Score: /2