

Name: \_\_\_\_\_

MATH 108

Fall 2022

HW 5: Due 09/22

*“Be aware of little expenses. A small leak  
will sink a great ship.”*

*–Benjamin Franklin*

**Problem 1.** (10pt) Joy Rider is trying to save for college. At the end of each month, she places \$300 into an account that earns 4.6% yearly annual interest, compounded monthly. If she does this for 4 years, how much has she saved for college?

**Problem 2.** (10pt) Oren Jellow owns a produce distribution company. To plan ahead, every 3 months, he makes a deposit at the beginning of the month, so that he will eventually have enough saved to replace a delivery truck. The money is placed into an account earning 3.8% annual interest, compounded quarterly. If he anticipates having to replace a truck every 5 years and the trucks cost \$85,000 to replace, how much money should he deposit each time?

**Problem 3.** (10pt) Sara Bellum is setting aside money for her nephew's HS graduation in 2 years. At the start of each month, she places \$20 into an account that earns 1.8% yearly annual interest, compounded semiannually. How much will she be giving her nephew at the end of the 2 years?

**Problem 4.** (10pt) Sonny Day is saving for a down payment on a condo. He wants to have \$35,000 saved in the next 5 years. So at the end of each month, he will make a deposit into an account that earns 3.7% annual interest, compounded daily. How much should he make the monthly deposit?