

Name: _____

MATH 101

Spring 2022

HW 14: Due 05/05

*"Money is a terrible master but an
excellent servant."*

—P.T. Barnum

Problem 1. (10pt) Suppose you take out a loan for \$250 at a 5% annual interest rate, compounded monthly. How much is owed after a year and a half?

Problem 2. (10pt) If you invest \$6000 in an account which earns 2.5% annual interest, compounded continuously, how much is in the account after 7 years?

Problem 3. (10pt) If one were to place \$5000 into a savings account that earns 4% annual interest, compounded semiannually, how long until the account has \$7000?

Problem 4. (10pt) If you take out a loan for \$1200 at a 6.5% annual interest, compounded continuously, how long until the loan amount has doubled?