

Math 1332 Exam 3

Wednesday, October 13

Name: _____

This is the exam for module 4. It is worth a total of 100 points. A scientific or four-function calculator is allowed, but no other electronic devices are permitted. Carefully read each question and understand what is being asked before you start to solve the problem. **Show your work in an orderly fashion, and circle or mark in some way your final answers.** It is okay to leave your answers in exact form rather than give the approximation output by a calculator.

$$P_n = P_0 + nk \cdot \left(\frac{r}{k} \cdot P_0\right)$$

$$P_n = P_0 \cdot \left(1 + \frac{r}{k}\right)^{nk}$$

$$P_n = A \cdot \frac{\left(1 + \frac{r}{k}\right)^{nk} - 1}{r/k}$$

$$A = P_0 \cdot \frac{\frac{r}{k} \cdot \left(1 + \frac{r}{k}\right)^{nk}}{\left(1 + \frac{r}{k}\right)^{nk} - 1}$$

For all these:

P_0 = principal

P_n = total after n years

n = number of years

r = APR

k = number of periods per year

A = Annuity or payment amount