**Unit 6: Instructor Graded Assignment - Version 2.1**

**Business Investments**

Unit 6 focuses on business investment concepts covered in Chapter 14: “Annuities and Sinking Funds.”

For this Assignment, you will write an essay to address the requirements described below. Your essay must be carefully planned, and written using well-constructed sentences and paragraphs. Make sure that your grammar and spelling are correct. Points will be awarded for content as well as composition. Your essay must be a minimum of 1 page in length with standard 1 inch margins and is required to have at least one reference from a reliable source. This means that you cannot use sites like Wikipedia, Ask.com®, and Yahoo® answers and that only references from reliable sources will earn points. If you have a question regarding the suitability of a source, please contact your instructor. **All resources should be cited both as an in-text citation as well as being listed on a reference page in APA format.**

Assignments must be submitted as a Microsoft® Word® document and uploaded to the Dropbox for Unit 6. Include your essay directly in this document following the instructions.

All Assignments are due by Tuesday at 11:59 p.m. ET of the assigned unit.

**Essay Assignment**

Write an essay discussing how you, as a business owner, can use annuities to achieve business goals. Financial decisions require careful planning and prioritizing, especially when large, capital-intensive purchases are involved. As you establish a process to achieve your company goals, you will need to demonstrate your math skills, consider different investment options, and describe how different investment vehicles can be used effectively to accomplish business goals.

**Scenario:**

As the owner of a vinyl fencing company, you are making plans for two large purchases in the next 3 to 5 years.

**Purchase 1:**

You plan to expand your vinyl fence company in the future, and must purchase a new warehouse facility to achieve this goal. Your bank is offering you two very attractive investment options: an ordinary annuity and an annuity due (both compounding quarterly and paying 8% annual interest over a 5-year period). Your 5-year budget includes saving $2,000.00 each quarter. To evaluate which option will benefit the business most, you must evaluate both annuity options by calculating the future value of each option and explain how the investment will help you to carry out your goals.

**Purchase 2:**
After careful review of your maintenance log, you also realize that you will need to replace a fence post molding machine that sells for $40,000.00. You estimate that you will need to purchase a new machine in 3 years’ time, as the existing machine will reach the end of its useful life in that time. You plan to save for this purchase using a sinking fund that compounds semi-annually, and earns a 12% annual rate.

Your essay should in include the following information

1. Calculate the future value of both the ordinary annuity and the annuity due options being offered by your bank. Explain the differences between these two investment options. Select the best annuity option for your business, and explain why that option is preferable.

1. Calculate the sinking fund payment required for the fence post molding machine.
2. Compare the shorter timeframe and higher interest rate of the sinking fund with the longer-term warehouse annuity option you chose. Be sure to calculate and report how much interest you will earn from the annuity chosen for the warehouse and the amount of the sinking fund investment.
3. Develop a plan to prioritize these two purchases, and discuss the potential impact that these will have on the future of your business. For example, is expanding your business more important than saving for and paying cash for a fence post molding machine? Remember, you could borrow money to finance the fence post molding machine when it eventually breaks, but doing so will cost the business in finance charges.

Remember, this Assignment is worth 40 points so it should be complete and cover each point as outlined above. Be sure to include at least one APA formatted reference.

You may submit your Assignment to the Math Center for review. Tutors will not grade or correct the Assignment, but they will provide guidance for improvement. In addition, tutors will not help you find websites for the Assignment. Be sure to submit Assignments early enough to receive feedback and make corrections before the Assignment due date (24-hour turn-around times Monday-Thursday and 48 hour turn-around times on weekends are typical). Email Assignments to: kumc@kaplan.edu. Please put “**MM255 Assignment Review**” in the subject line of the message.

**Critical elements for Writing:**

1. Essay should include a highly-developed viewpoint and purpose.

2. Assignment is written in Standard American English and demonstrates superior organization. 3. Communication is highly ordered, logical and unified.

4. The assignment displays exceptional content, organization, style and mechanics.