### **GUIDED PRACTICE**

Class: EMT 5380 Date assigned: Date due: Time estimate to complete this assignment: 120 min

# Overview/Introduction

This content area is focused on the concept of equivalence among cash flows. Common cash flow structures in practice, which are uniform, arithmetic gradient, and geometric gradient, are discussed. The textbook has very smooth and engaging flow in explaining the concepts. In addition, I plan to prepare videos that explain the material and demonstrate how to use the derived formulas on problems.

# Learning Objectives

#### Basic objectives

- Identify uniform cash flow and its formula
- Identify arithmetic gradient cash flow and its formula
- Identify geometric gradient cash flow and differentiate it from arithmetic gradient cash flow
- Use the formulas to find the present value and future value of a given cash flow

#### Advanced objectives

- Identify the relationship between the factors associated with the uniform, AG, and GG cash flows
- Associate the real world investment problems with the discussed cash flows
- Compute the investment worth when compounding and payment period differ

### Preparatory Activities and Resources:

- 1. <u>Videos</u>: Watch the two videos posted on blackboard and complete the examples discussed in the videos
  - a. Engineering Economic Analysis Uniform Series (22:35)
  - b. Engineering Economic Analysis Gradient Series (14:43)
- 2. <u>Text</u>: Read page 112-120 and 129-138 and take the posted quiz

# Exercises: Please complete by \_\_next week\_\_.

1. <u>Pre-class assignment</u>: Complete the assigned problems from the textbook, submit your work as a Word document to blackboard. Prepare to discuss them in class