Homework 12

1. Do Problem 4.11 in the textbook. Pay attention to the interest rate statement!

2. Do Problem 4.12 in the textbook. Be sure you answer the actual question!

3. ACME Corp. is evaluating three opportunities to make money:

   Option A: Replace outdated equipment to reduce defective parts. Initial cost = $200,000. Annual savings from not having to remake parts: $53,000. Salvage value of equipment at the end of the 10-year study period: $10,000.

   Option B: Change packaging to reduce shipping costs. Initial cost = $180,000. Annual savings in shipping costs: $30,000. Salvage value of equipment at the end of the 10-year study period: $0.

   Option C: Manufacture parts in-house rather than purchase them. Initial cost = $250,000. Annual savings from eliminating the outside vendor = $60,000. Salvage value of equipment at the end of the 10-year study period: $20,000.

   If ACME only has $300,000 of capital available to pay the initial cost, it can only choose one project. Which project should they choose? Assume ACME’s MARR is 14% per year.

4. In the previous problem, if ACME had enough capital to fund all of the projects, which one(s) should they choose?