

## **1.011 Project Evaluation**

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### **Assignment 3 Equivalence of Cash Flows**

Assigned: Wed. February 18, 2003

Due: Wed. March 24, 2003

#### **Problems from Text (40%)**

3-22 (5%)

3-23 (5%)

3-30 (5%)

3-34 (5%)

3-37 (5%)

3-47 (5%)

3-49 (5%)

3-104 (5%)

#### **Create a Spreadsheet for Equivalence Analysis (40%)**

Create a spreadsheet that you can use to estimate equivalent cash flows for arbitrary sequence of cash flows over 50 periods. You want to be able to use this spreadsheet to convert an arbitrary sequence of cash flows into a present worth, a future worth at any time  $t$ , or an annuity over  $N$  periods. You want to be able to do this using both discrete and continuous compounding factors, and you want to be able to compute effective interest rates. Take some care in designing your spreadsheet so you can easily do sensitivity analysis on interest rates and  $N$ , and so you can easily print out a compact and attractive report showing results. Figures 3-27, 3-28, and 3-29 show how to incorporate the various discrete and continuous compounding factors and how to calculate effective interest rates.

#### **Spreadsheet Applications (20%)**

Use your spreadsheet to solve the following problems:

3-54 (5%)

3-55 (5%)

3-57 (5%)

3-65 (5%)