ENG 106 Homework #6 (due 22 Feb)

IRR for non-simple flows or increments

7.48 Assume the flows are stated in constant $ and the MARR is inflation-free; B-A is non-simple, so you must check to see if it is pure or mixed. (partial answer: for B-A, i\* is between 15 and 20%)

#2: Consider the following two mutually exclusive projects. Assume the MARR = 15%. If readily possible, use the IRR criterion correctly to determine which project should be selected. If the increment is mixed, however, use PW of the increment to determine which project is better.

|  |  |  |
| --- | --- | --- |
|  | Cash Flows | |
| n | Project A | Project B |
| 0 | -$300 | -$800 |
| 1 | 0 | 1150 |
| 2 | 690 | 40 |
| i\* | 52% | 46% |

Depreciation

9.13b Calculate the depreciation schedule over the full six years. (partial answer: D3 = $13,333)

9.25 (partial answer: D6 = $16,502)

9.34a, b For b, calculate the full deprec schedule, assuming the equipment is purchased partway through the first tax year and held a full five years, so sold during the 6th tax year. (partial answer: for DDB, D5 = $5,184)

Tax Elements

9.38 (partial answer: Total D = about $49k)

9.40b Assume sale occurs in the fifth tax year. Also find the gains tax. (partial answer: gains tax = about $15.3k)

10.9 (partial answer: average tax rate with the project = 34%)