**IE 260 CLASS EXERCISES - WEEK 10**

1. In the Rawhide Company (a leather products distributor), decisions regarding approval of proposals for capital investment are based upon a stipulated MARR of 15% per year. The five packaging devices listed in the following table were compared, assuming a 10-year life and zero market value for each at that time. Which one (if any) should be selected? Use incremental analysis using IRR.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Packaging Equipment | | | | |
|  | *A* | *B* | *C* | *D* | *E* |
| Capital Investment | $50,000 | $60,000 | $55,000 | $65,000 | $57,000 |
| Annual revenues less expenses | $9,000 | $12,700 | $11,300 | $13,800 | $12,200 |

1. If MARR = 10% per year, show which alternative is more desirable by using equivalent-worth if
2. you can use the repeatability assumption.
3. you can not use the repeatability assumption.

|  |  |  |
| --- | --- | --- |
|  | **A** | **B** |
| **Capital investment ($)** | 6000 | 8000 |
| **Annual cash flow** | 1900 | 1700 |
| **Useful life (years)** | 7 | 11 |