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ISE 307, Term 153
ENGINEERING ECONOMIC ANALYSIS

Quiz# 3

Date: Monday, August 15, 2016

- Q1.** The owner of a business is considering investing \$80,000 in new equipment. He estimates that the net cash flows will be \$8,000 during the first year and will increase by \$2,000 per year each year thereafter. The equipment is estimated to have a 10-year service life and a net salvage value at the end of this time of \$10,000. The firm's interest rate is 15%.
- a. Determine the annual capital cost (ownership cost) for the equipment.
 - b. Determine the equivalent annual savings (revenues).
 - c. Determine whether this investment is wise.

Q2. Consider the following investment projects:

<i>n</i>	Project 1	Project 2
0	-\$1,200	-\$2,000
1	800	1,500
2	900	1,100
IRR	26.13%	20.60%

Determine the range of MARR for which Project 2 would be preferred over Project 1.