

Review Question: Equivalent Annual Annuity

- 1) The EAA tools can be applied to projects with net benefits instead of just net costs. So instead of trying to minimize the Equivalent Annual cost (like the example in class), you are trying to maximize the Equivalent Annual benefit. Try the following question:

Your company is considering the following 2 projects:

	Year 0	1	2	3
A	-40	30	50	10
B	-50	40	50	

The discount rate is 8%. What are the NPV's of the two projects?

If you are going to repeat either A or B forever, which one is better?

Review Question: Real Options

You are in charge of new product development and you are trying to decide whether to roll out a new product. It will cost \$1 billion to set-up the fabrication unit and to manufacture the first batch of the product. There is a 70% chance that the product will be a hit and a 30% chance that the product will flop.

If the product is a hit, you will get revenues with a PV of \$3 billion.

If the product is a flop, you will get revenues with a PV of only \$100 million.

You can (if you want) spend \$20 million to test market the product, which will tell you for sure if the product will be a hit (70% chance) or a flop (30% chance).

Use a decision tree to show the expected NPV if you go ahead without test marketing and the expected NPV if you test market first. How does test marketing add value even though it costs money?