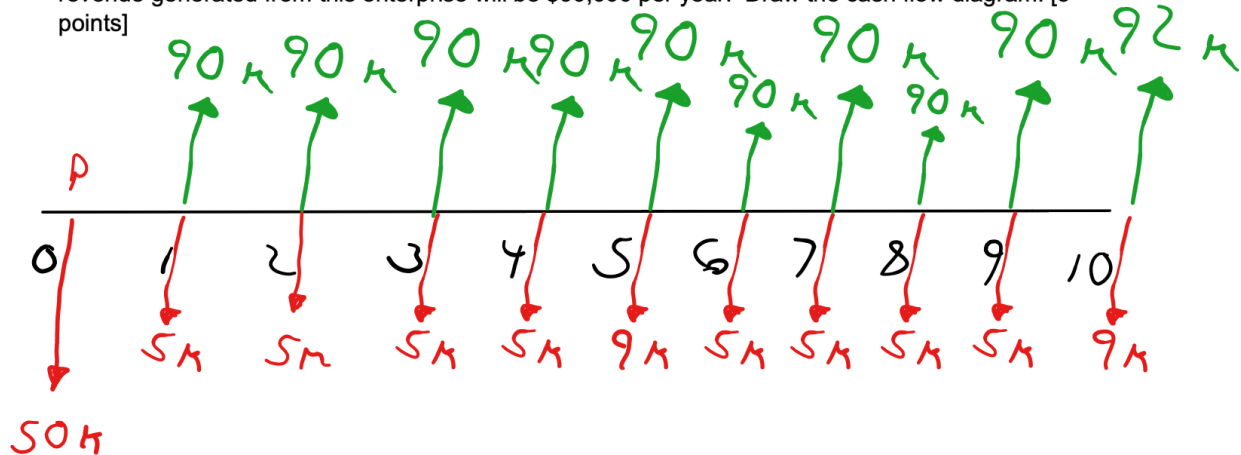


**E355 Engineering Economics Spring 2022  
Classroom Assignment #1**

**“I pledge my honor that I have abided by the Stevens Honor System”**

**By: Alexander Gaskins, Daniel Goldberg, and Samuel Gavrilov**

1) Stevens Restaurant will purchase a new multi-burner professional stove for \$50,000 dollars. The annual O&M costs will be \$5,000 over the useful life of 10 years, after which it will be sold for \$2,000. Periodic overhauls will be required every 5 years, which are estimated to cost \$4,000 each. The revenue generated from this enterprise will be \$90,000 per year. Draw the cash flow diagram. [3 points]



**Net Gain in \$ = \$794,000**

2) Are APY and APR the same thing? [1 point]

**APR - Interest charged**

**APY - Interest earned**

3) Is APR or APY better for you if you are investing money? Why?

**APY, because it accumulates upon what you invest over time.**

**APR would be interest compiled over time upon a payment or something that contributes to a negative monetary gain, such as a yearly loss due to interest charged on a mortgage payment.**