Castille Pharmaceuticals (CP) currently leases testing equipment for use during the production of a product at a cost of $61,000 **annually** that includes all maintenance expenses. The product line produced on the machine has revenues of $100,000 annually. Three options need to be evaluated.

1. Continuing to lease the present machine at the same cost,
2. Purchase the existing machine (refurbished by the vendor at the vendor’s expense) at a cost of $150,000. Maintenance costs are estimated at $18,000 annually.
3. Purchase a later model that is more accurate for $200,000. Annual maintenance costs are estimated at $18,000. Cost reductions in labor and fewer bad batches are estimated at $36,000 annually. Installation and training for this new machine would be $50,000 in year 0, which is also depreciable.

Both of the machines are guaranteed to have a five year life span with a salvage value of 15% of the machine’s purchase price, which will be received at the end of the fifth year.

Use straight line depreciation and a tax rate of 35%.

Assuming that MARR is 10% and all maintenance costs and production savings are incurred at the end of the year, should the present lease be continued, or one of the two machines be purchased? Base your decision on the comparative present worth of each of the three alternatives.