**12-2: Variation on make or buy analyses.**

**Suppose that your company is trying to decide whether it should buy special equipment to prepare high-quality publications itself or lease the equipment from another company.  Leasing the equipment costs $240 per day.  Purchasing the equipment requires an initial investment of $6,800 and a daily operating cost of $70.  After how many days will the lease cost be the same as the purchase cost for the equipment?  Assume that your company would only use the equipment for 30 days.  Should the company buy or lease?**

**Leasing: 240 dollars per day**

L(x) = 240x

L(x) = 240(30 days)

L(x) = 7200

**Buying: 6800 initial investment + 70 dollars per day**

B(x) = 6800 + 70x

B(x) = 6800 + 70(30 days)

B(x) = 6800 + 2100

B(x) = 8900

It is cheaper for the company to lease the equipment than it is to buy over 30 days.  The cost to buy the equipment will become cheaper after about 37 days.