**Question**

**Stermon Mills Revisited**

You decide to take Machine 4 from two-week cycles to one-week cycles. Assume that previously, with 2-week cycles, you encountered a total of 10% downtime due to changeovers. You will receive a 5% premium for your JIT deliveries.

Given:

Variable contribution per ton = $300 [you’ll use this in your dollars-lost calculation]

Original throughput on Machine 4 = 280 tons per day

You operate 350 days per year

Net sales per ton is $690 [you’ll use this in your premium gained calculation]

1. You were losing 10% time to changeovers with 2-week cycles. What percentage of time are you losing to changeovers now with weekly cycles?
2. How many tons per day are lost due to changing over more often?
3. What is the current annual net loss (in dollars) when we move to weekly changeovers?
4. Calculate to the nearest ton (no decimal places) your break-even throughput in tons-per-day.
5. What does your changeover lost time percentage need to be in order to hit your break-even mark?