Quiz 5 - Solution

a)   for a price increase (pi' -> pi*)   for a price decrease (pi* -> pi')

naive:	A+B+C+D+E		naive:	A	
Δ in CS:	A+B+C		Δ in CS:	A+B+C	
CV:	A+B+C+D		CV:	A+B	
EV:	A+B		EV:	A+B+C+D	

b) Profit maximization (PY-C(Y) max!) implies setting MC=P. Mickeysoft™'s marginal cost is 2Y, so its profit maximizing output is P/2. Note that at this output it makes a positive profit, otherwise output would be zero. Since MC=2Y is increasing in Y, Mickeysoft™'s underlying technology exhibits decreasing returns to scale. We would expect to see increasing returns to scale for a software company because the first copy of a program is certainly more expensive to produce than the 100,000th copy.