

Module 53 Practice Problem

Jack and Jill have a lemonade stand. They can sell as many cups as they want at the market price of \$2 per cup. Their goal is simple: produce the quantity of lemonade that maximized their profits.

Output (cups)	Total Revenue (PxQ)	Total Cost	Profit
0	\$0	\$1	(\$1)
1	2	1.25	0.75
2	4	1.75	2.25
3	6	2.5	3.5
4	8	3.5	4.5
5	10	4.75	5.25
6	12	6.25	5.75
7	14	8	6
8	16	10	6
9	18	12.25	5.75
10	20	14.75	5.25

Questions:

Calculate total revenue and profit.

At what point does profit decline?

At what point should production be stopped?

As the profit column indicates, profit rises until the 9th cup of lemonade is produced and so production should stop at the 8th cup because profit is \$6 at both levels of output. In such cases, firms will chose to produce the larger of two levels of output. The 9th cup will not be produced, so production stops at 8.