

Tabular Analysis of Equilibrium

P	Q	P	Q	P	Q
10	3	5	5	8	3
12	4	6	6	12	4
14	5	7	7	16	5
16	6	8	8	20	6
18	7			24	7
20	8			28	8

Agenda

- The previous lecture worked with graphical cost functions.
- Now we turn to tabular cost functions.

A Tabular Analysis

1

Q	C	AC	MC
0	6		
1	12	12.0	6.0
2	20	10.0	8.0
3	30	10.0	10.0
4	42	10.5	12.0
5	56	11.2	14.0
6	72	12.0	16.0
7	90	12.9	18.0
8	110	13.8	20.0

A Tabular Analysis

2

Q	C	AC	MC
0	10		
1	11	11.0	1.0
2	13	6.5	2.0
3	16	5.3	3.0
4	20	5.0	4.0
5	25	5.0	5.0
6	31	5.2	6.0
7	38	5.4	7.0
8	46	5.8	8.0

A Tabular Analysis

3

Q	C	AC	MC
0	12		
1	12	12.0	0.0
2	16	8.0	4.0
3	24	8.0	8.0
4	36	9.0	12.0
5	52	10.4	16.0
6	72	12.0	20.0
7	96	13.7	24.0
8	124	15.5	28.0

Supply Curve, Firm 1

Q	C	AC	MC
0	6		
1	12	12.0	6.0
2	20	10.0	8.0
3	30	10.0	10.0
4	42	10.5	12.0
5	56	11.2	14.0
6	72	12.0	16.0
7	90	12.9	18.0
8	110	13.8	20.0

P	Q
10	3
12	4
14	5
16	6
18	7
20	8

Supply Curve, Firm 1

Q	C	AC	MC
0	6		
1	12	12.0	6.0
2	20	10.0	8.0
3	30	10.0	10.0
4	42	10.5	12.0
5	56	11.2	14.0
6	72	12.0	16.0
7	90	12.9	18.0
8	110	13.8	20.0

P	Q
10	3
12	4
14	5
16	6
18	7
20	8

Supply Curve, Firm 2

Q	C	AC	MC
0	10		
1	11	11.0	1.0
2	13	6.5	2.0
3	16	5.3	3.0
4	20	5.0	4.0
5	25	5.0	5.0
6	31	5.2	6.0
7	38	5.4	7.0
8	46	5.8	8.0

P	Q
5	5
6	6
7	7
8	8

Supply Curve, Firm 3

Q	C	AC	MC
0	12		
1	12	12.0	0.0
2	16	8.0	4.0
3	24	8.0	8.0
4	36	9.0	12.0
5	52	10.4	16.0
6	72	12.0	20.0
7	96	13.7	24.0
8	124	15.5	28.0

P	Q
8	3
12	4
16	5
20	6
24	7
28	8

The Industry Supply Curve

P	Q
10	3
12	4
14	5
16	6
18	7
20	8

P	Q
5	5
6	6
7	7
8	8

P	Q
8	3
12	4
16	5
20	6
24	7
28	8

The Industry Supply Curve

P	Q
10	3
12	4
14	5
16	6
18	7
20	8

P	Q
5	5
6	6
7	7
8	8

P	Q
8	3
12	4
16	5
20	6
24	7
28	8

P = 5, Q = 5

The Industry Supply Curve

P	Q
10	3
12	4
14	5
16	6
18	7
20	8

P	Q
5	5
6	6
7	7
8	8

P	Q
8	3
12	4
16	5
20	6
24	7
28	8

P = 6, Q = 6

The Industry Supply Curve

P	Q
10	3
12	4
14	5
16	6
18	7
20	8

P	Q
5	5
6	6
7	7
8	8

P	Q
8	3
12	4
16	5
20	6
24	7
28	8

$P = 7, Q = 7$

The Industry Supply Curve

P	Q
10	3
12	4
14	5
16	6
18	7
20	8

P	Q
5	5
6	6
7	7
8	8

P	Q
8	3
12	4
16	5
20	6
24	7
28	8

$P = 8, Q = 11$

The Industry Supply Curve

P	Q
10	3
12	4
14	5
16	6
18	7
20	8

P	Q
5	5
6	6
7	7
8	8

P	Q
8	3
12	4
16	5
20	6
24	7
28	8

$P = 10, Q = 14$

The Industry Supply Curve

P	Q
10	3
12	4
14	5
16	6
18	7
20	8

P	Q
5	5
6	6
7	7
8	8

P	Q
8	3
12	4
16	5
20	6
24	7
28	8

$P = 12, Q = 16$

The Industry Supply Curve

P	Q
10	3
12	4
14	5
16	6
18	7
20	8

P	Q
5	5
6	6
7	7
8	8

P	Q
8	3
12	4
16	5
20	6
24	7
28	8

$P = 16, Q = 19$

The Industry Supply Curve

P	Q
10	3
12	4
14	5
16	6
18	7
20	8

P	Q
5	5
6	6
7	7
8	8

P	Q
8	3
12	4
16	5
20	6
24	7
28	8

$P = 28, Q = 24$

Summary

- We find industry supply by adding firm supply curves.

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- We find industry supply by adding firm supply curves.
- At some prices, marginal firms are not in industry.
- We could compute each firm's profit at different prices.
- We could also compute industry price elasticity of supply.

End

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