

Monopoly Example

Total cost function: $TC = A + B \cdot Q^2$ $A = 300.00$ $C = 285.00$
 Total revenue function: $TR = P \cdot Q$ $B = 5.00$ $D = 10.00$
 Demand equation: $P = C - D \cdot Q$

Q	TC	P	TR	MC	MR	AC	AR	Profit
0	300.00	285.00	0.00					
1	305.00	275.00	275.00	5.00	275.00	305.00	275.00	-30.00
2	320.00	265.00	530.00	15.00	255.00	160.00	265.00	210.00
3	345.00	255.00	765.00	25.00	235.00	115.00	255.00	420.00
4	380.00	245.00	980.00	35.00	215.00	95.00	245.00	600.00
5	425.00	235.00	1,175.00	45.00	195.00	85.00	235.00	750.00
6	480.00	225.00	1,350.00	55.00	175.00	80.00	225.00	870.00
7	545.00	215.00	1,505.00	65.00	155.00	77.86	215.00	960.00
8	620.00	205.00	1,640.00	75.00	135.00	77.50	205.00	1,020.00
9	705.00	195.00	1,755.00	85.00	115.00	78.33	195.00	1,050.00
10	800.00	185.00	1,850.00	95.00	95.00	80.00	185.00	1,050.00
11	905.00	175.00	1,925.00	105.00	75.00	82.27	175.00	1,020.00
12	1,020.00	165.00	1,980.00	115.00	55.00	85.00	165.00	960.00
13	1,145.00	155.00	2,015.00	125.00	35.00	88.08	155.00	870.00
14	1,280.00	145.00	2,030.00	135.00	15.00	91.43	145.00	750.00
15	1,425.00	135.00	2,025.00	145.00	-5.00	95.00	135.00	600.00

Q=10 maximizes profits

