Competition-monopoly

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1. complete the following table

	Q	TC	FC	VC	AFC	AVC	ATC	MC
1	0.00	10.00	10.00	0.00	Inf		Inf	
2	1.00	15.00	10.00	5.00	10.00	5.00	15.00	5.00
3	2.00	17.50	10.00	7.50	5.00	3.75	8.75	2.50
4	3.00	20.50	10.00	10.50	3.33	3.50	6.83	3.00
5	4.00	23.50	10.00	13.50	2.50	3.38	5.88	3.00
6	5.00	27.50	10.00	17.50	2.00	3.50	5.50	4.00
7	6.00	32.00	10.00	22.00	1.67	3.67	5.33	4.50
8	7.00	37.50	10.00	27.50	1.43	3.93	5.36	5.50
9	8.00	45.00	10.00	35.00	1.25	4.38	5.62	7.50
10	9.00	60.00	10.00	50.00	1.11	5.56	6.67	15.00
11	10.00	85.00	10.00	75.00	1.00	7.50	8.50	25.00

2. If total revenue is give by

$$TR = 541Q - 2Q^2$$

and total cost is given by

$$TC = 50 - 5Q + Q^2$$

Find the profit-maximising level of output and the total profits.

3. Make sure that you can draw apply the average cost (AC), marginal cost (MC), average revenue (AR), marginal revenue (MR), profit-maximising point of output (q), profit-maximising profit and the long-run equilibrium to the perfectly competitive and the case of monopolistic competition.