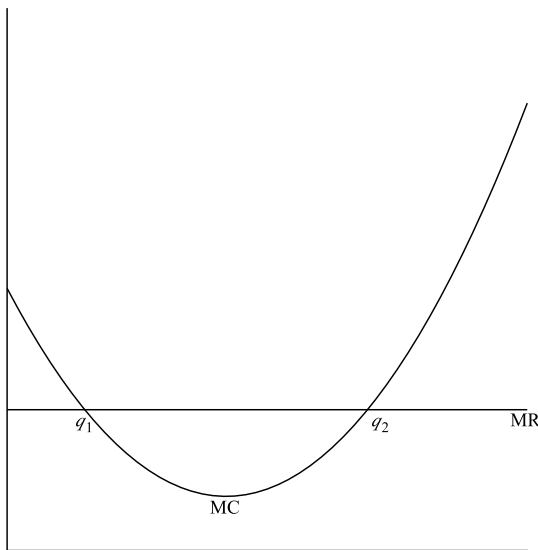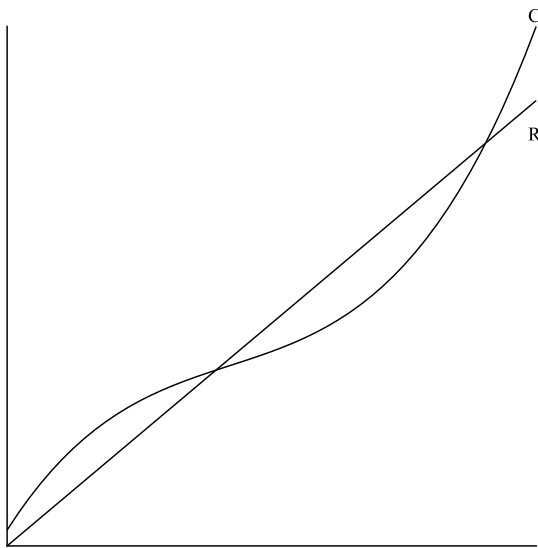Example 1. Consider the following two graphs, showing cost and revenue, and marginal cost and marginal revenue. (a) Interpret the significance of q_1 and q_2 on the graph of R and C. (b) Identify which point is a maximum for profit, and explain.

Example 2. (*Based* on Hughes-Hallett, 4e, 4.4#7) The table below shows marginal cost MC and marginal revenue, MR.

   (a) Use the marginal cost and marginal revenue at a production of $q = 5000$ to determine whether production should be increased or decreased from 5000. (Explain, in writing.)

   (b) Estimate the production level that maximizes profit. (Explain, in writing.)

q	5000	6000	7000	8000	9000	10000	11000	12000	13000	14000	15000
MR	60	58	56	55	54	53	53	53	53	53	53
MC	48	52	54	55	58	63	60	57	54	53	52