# Answer on Question #60524, Economics / Microeconomics

**Question**

Given the following information:

P = 20 – 2Q

MC = AC = 4

a) Determine the profit-maximizing output and price charged by a monopolist.

b) Determine the competitive price and output.

c) Graphically illustrate and calculate the deadweight loss due to the monopoly.

**Answer**

a) Under monopoly, MR = MC. Therefore, MR = 20 - 4Q = 4, so Qm = 4 and Pm = 12.

b) Under competition, Pc = AC = 4 and Qc = 8.

c) The deadweight loss is (1/2)(Pm - Pc)(Qm - Qc) =16.