Problem Set #10
Game Theory & Oligopoly

Tutorial Problems

1. Assume quantities must be integers and marginal cost is zero. Alpha and Beta are duopolists. The market demand schedule is given in the table below. If Alpha and Beta plan to collude and equally split the market, what is the profit-maximizing quantity per firm?

Q	1	2	3	4	5	6	7
P	24	20	18	16	14	12	10

   A. 1
   B. 3
   C. 4
   D. 6
   E. None of the above.

2. Continuing from the question above, what is Beta's marginal revenue from breaking the collusive arrangement and producing 1 more unit?

Q	1	2	3	4	5	6	7
P	24	20	18	16	14	12	10