An illegal cartel has been formed by three leading ready-mix cement suppliers in the local market. Total costs at various levels of service per day are as follows:

|  |  |  |  |
| --- | --- | --- | --- |
|  | Total Cost ($000) | | |
| Daily Output  (000 cu. yds.) | Ready Mixes, Inc. | Concrete ProductsCo. | Hard Stuff, Inc. |
| 0 | $ 2 | $ 3 | $ 0 |
| 1 | 12 | 14 | 8 |
| 2 | 21 | 23 | 17 |
| 3 | 29 | 30 | 27 |
| 4 | 36 | 41 | 38 |
| 5 | 47 | 53 | 50 |

A. Construct a table showing the marginal cost of production per firm.  
B. From the data in part A, determine an optimal allocation of output and maximum profits if the cartel sets Q = 10(000) and P = $10.  
C. Is there an incentive for individual members to cheat by expanding output when the cartel sets Q = 10(000) and P = $9?