

problem 2



The cost of operation of a unit consists of two components C_1 and C_2 which can be expressed as functions of a parameter p as follows:

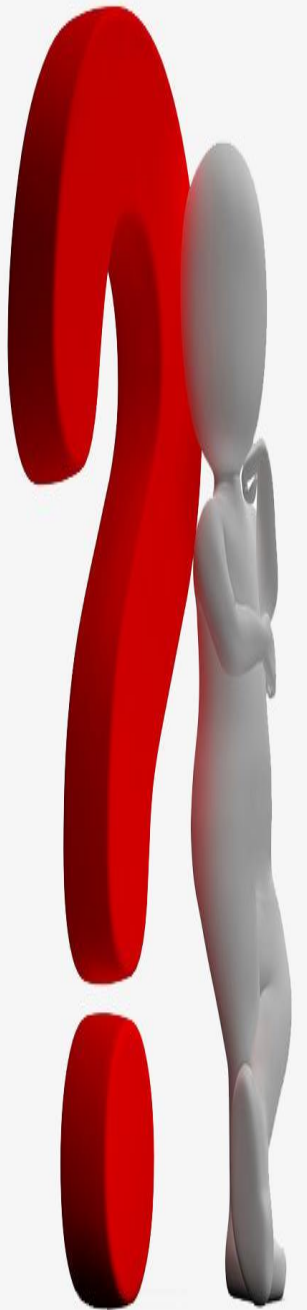
$$C_1 = 30 - 8p$$

$$C_2 = 10 + p^2$$

$$\text{Total cost} = C_1 + C_2$$

The parameter p ranges from 0 to 10. Determine the value of p with an accuracy of ± 0.1

where the cost of operation would be minimum.



expected output:

```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 6.3.9600]
(c) 2013 Microsoft Corporation. All rights reserved.

E:\imt school\c pool\p81>gcc main.c
E:\imt school\c pool\p81>a.exe
MINIMUM COST = 24.00 AT p = 4.0
E:\imt school\c pool\p81>
```

