AP Computer Science

Lab: Maximum Profit

Chadesk is an office furniture manufacture company. The monthly cost for making x number of office desks is modeled by

$$C(x) = (x - 28)^2(x - 3)^2 + 50$$

with function domain of [4, 32].

And the monthly sales income for selling x number of office desks is modeled by

$$S(x) = (x - 32)^2(x - 6)(x - 5)(x - 4)$$

with function domain of [6, 40].

Both the cost $C(x)$ and sales income $S(x)$ are measured by dollar. Write a Java program to find the monthly maximum profit for Chadesk.