

More Min/Max Questions

1) Find the minimum and maximum values of each function on the given interval:

a) $f(x) = 8x - x^2$ $[0, 6]$

b) $f(x) = \frac{x}{x^2 + 2}$ $[-1, 4]$

3) Find the dimensions of the rectangle with greatest area that has its base on the x -axis, and is bound on the top by the equation $y = 25 - x^2$

4) Apple is working on the next generation of i-Pods. Their research department has figured out the price will be related to the units sold, such that $p = 1000 - x$.

The cost of producing x - units per day is $C = 3000 + 20x$

Find the maximum profit.