# New Jersey City University <br> Intermediate Algebra <br> Peer-Led Team Learning Workshop 13B <br> Quadratic Functions and Quadratic Inequalities 

## Section 8.5

1) The graph of a quadratic function of the form $f(x)=a x^{2}+b x+c$ passes through the points $(0,-3),(2,-3)$, and $(3,-9)$. What are the values of $a, b$, and $c$ ? Write the function.

## Section 8.6

2) The profit of a small manufacturing company is given by equation $P=-10\left(x^{2}-200 x+1800\right)$, where $P$ is the profit and $x$ is the number of products the company manufactures.
(A) What is the minimum number of items the company must manufacture to have a profit?
(B) How many items must the company manufacture to have a profit greater than $\$ 500$ ?
