Business PreCalculus MATH 1643 Section 004, Spring 2014 Homework 19

- **1-** Find the vertex of $f(x) = 2x^2 8x + 9$.
- **2-** A revenue function is given by $R(x) = 15 + 114x 3x^2$, where x is the number of units produced and sold. Find the value of x for which the revenue is maximum.
 - **3-** Find the quadratic function that has a vertex (-3, -2) and passes through (0, -8).
 - **4-** Find the vertex = $\left(-\frac{b}{2a}, f(-\frac{b}{2a})\right)$ and the intercepts of $y = x^2 4x + 5$.