

QUIZ 4 - MATH 111

Friday, February 23

YOUR NAME: _____

George Voutsadakis

Read each problem **very carefully** before starting to solve it and do only what is asked. Each problem is worth around 5 points. It is necessary to show **all** your work. Correct answers without explanations are worth 0 points. GOOD LUCK!!

1. [4 points] William and Harry would like to have some chicken wings. They are trying to decide whether they should go to “Abundant Wings” or to “Bountiful Wings”.
 - The first outfit (AW) charges a flat \$10 fee per order and 65 cents per wing.
 - The second outfit (BW) charges a flat fee \$7.60 per order and each wing costs 85 cents.

Find under which condition it is more profitable to buy from “Abundant Wings”.

2. [4 points] Consider the quadratic function $f(x) = 3x^2 - 12x + 17$. Write the equation in standard form and find the domain and the range. You need to show all your steps. Also add short explanations.

3. [4 points] Find an equation for the parabola shown and give your answer in general form.

