**College Algebra & Trigonometry**

**Fall 2018 EXAMPLE/Essay Final**

**Ms. Wiggins**

**Directions: Write an 3-5 paragraph essay responding to the writing prompt below. The answer must be written in essay format and all questions within the writing prompt must have a written response to receive credit. Each question addressed within the prompt is worth a maximum of 4 points each for a total of 32 points and is worth 50% of your final exam** **grade.**

**Writing Prompt:** You just graduated high school and you need to find a job that will cover your monthly expenses so you can move into your own place. Your monthly expenses are $1600, which includes rent, utilities, transportation and food. Create a function that will represent how many hours you work as function of much money you will make and express the function in your own words (NO NUMBERS) and explain how much per hour you need to make at minimum. **(Assuming you work 40 hours per week)** If you make $8 an hour plus $25 added per check to cover traveling expenses, would that be enough to afford your monthly expenses? Explain. If you make $12 an hour minus $100 being deducted per month for your retirement fund, would that be enough to afford your monthly expenses? Explain. Would you gross more money per month making $8 an hour or $12 per hour? Explain. Explain in words how you would graph both functions *f(x)* = 8x + 25 and *h(x)* = 12x – 100. Are the functions *f* and *h* parallel, perpendicular (If so, name the point of intersect) or neither? What are the x- and y-intercepts of each function. What is *f(h(x)) and h*(*f*(x)) if x = 7?