55 Points
Early Bird (5 points Bonus):   Friday, 9/8, 5:30 pm
On-Time, full credit: Monday, 9/11, 5:30 pm
Late, 20% Discount: Sunday, 9/17, 11:59 pm

FORMATTING: This is semi-formal writing, here. That means show some professionalism. You don't have to type it out, but you do need to be very clear. Check out some of the examples I posted, so you won't think I'm expecting DaVinci.

If you want to know what I'm looking for, check out the following links:

Writing Project #1, Spring, 2019 An old set of questions.

Writing Project #1, Spring, 2019 Solutions (for the Grader) Some extra work is included. And things are a little more cramped than I want to see from you.

#s 1 – 4 Find all real or non-real solutions x of the following quadratic equations using the quadratic formula. Be sure to *compute the discriminant, first, and separately*. I'm looking for that on tests, as well, *whenever* you use the quadratic formula. It modularizes the work, and it tells you what you're getting into.

1. (5 pts) $x^2 + 5x - 36 = 0$
2. (5 pts) $7.27x^2 - 12.22x - 17.27 = 0$ (Round your final answer to 4 decimal places.)

BONUS: (5 pts) Give an *exact* answer for #2, in simplified radical form, and NO DECIMALS.

3. (5 pts) $49x^2 - 28x + 7 = 0$ (Give an exact answer, in simplified radical form.
4. (5 pts) $bx^2 + \pi x - 11w = 0$ (Solve for x. Your answers will have letters in them. That's OK!)

#s 5, 6 Solve the following by factoring. You may use the "sledgehammer," if you wish, but write the polynomial in factored form, after you find the solutions, to show you understand the connection between factors and solutions, frontwards and backwards! Give answers as integers or fractions, in lowest terms.

5. (5 pts) $x^2 - 4x - 77 = 0$ (If you used factoring for #1, say "I already factored this one!"
6. (5 pts) $28x^2 - 100x + 75 = 0$

#s 7 – 10 Solve the following by completing the square. Do not use decimals; rather, use *fractions*, as needed, to complete the square. No 2.5^2 for #8. Add $\left(\dfrac{5}{2}\right)^2$ on the left-hand side and $\dfrac{25}{4}$ on the right-hand side. For full credit, submit final answers in simplified radical form, when rational solutions are not possible.

7. (5 pts) $x^2 + 6x - 15 = 0$
8. (5 pts) $x^2 - 5x + 1 = 0$
9. (5 pts) $3x^2 + 2x + 5 = 0$
10. (5 pts) $3x^2 - 4x - 1 = 0$

NOTE: I can't guarantee feedback *before* the test if I don't receive your project by the early-bird deadline. Since I post the solutions the evening of Monday, 9/11, after that, there's a 20% deduction from your score.