

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. Here's what I need to see on the PDF of your work:

1. Plain white background without lines. Letter-size "paper": 8 ½ x 11-inch. If you do your work on plain white A4 Letter paper and scan that, that's what I'm looking for. If the background on your work is gray, because of the way you're imaging/scanning it, it will not be accepted. Plain white.
2. Leave margins. "MAT 1340" in big letters in top left corner of every page solves all problems with margins. If you don't leave a margin, you won't get credit for the problem.
3. Write DARK. I have glaucoma, and if your writing is too faint for me to read, you'll just get a '0' and I will move on to the next paper. I don't mind if you use pen. Just put a line through mistakes.
4. Leave ROOM between problems and around your work. Saving paper to save the planet is a false economy, when it comes to your school work! I set a semi-bad example, because I'm worried about 100 students making copies of my solutions, which *is* a paper-waste, so I tend to spread a problem across 2 columns, even though I never want to see more than one column of work, when I'm grading. I will provide examples of what's acceptable and what's not.

When you've finished all 10 problems, scan to PDF and upload to the Assignments tool (Some call it drop-box) for Writing Project #1. This project is due Saturday, February 4th, by midnight.

#s 1 – 3 Find all real (or non-real) solutions 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 face a quadratic expression. It modularizes the work, and it tells you what you're getting into.

1. $x^2 + 7x - 18 = 0$
2. $5.89x^2 - 13.09x + 7.26 = 0$ (Round your final answer to 4 decimal places.)
3. $25x^2 - 20x + 7 = 0$ (Give an exact answer, in simplified radical form.)
4. $3mx^2 - 2wx + 5r = 0$ (Your answers will have letters in them. That's OK!)

#s 5, 6 Solve the following by factoring. You may use a 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. $x^2 + 7x - 18 = 0$
6. $589x^2 - 1309x + 726 = 0$

#s 7 – 10 Solve the following by completing the square. Do not use decimals; rather, use *fractions*, as needed, to complete the square. No 3.5^2 for #7. Use $\left(\frac{7}{2}\right)^2$.

7. $x^2 + 7x - 18 = 0$
8. $x^2 - 24x - 9$
9. $5x^2 + 2x + 3 = 0$
10. $4x^2 - 16x + 11 = 0$

Resources: [Writing Project #1 Instructional Notes and Videos](#), [Example Writing Project #1](#), [Example Writing Project #1 Solutions](#). (Leave more space than I generally left around my work, although what I did is acceptable.)