Week 18 Algebra 2 Assignment:

Day 1: Chapter 8 test
Day 2: pp. 353-354 #1-19
Day 3: pp. 355-356 #1-11 all, 13-19 odd
Day 4: pp. 359-360 #1-12 all, 14-20 even
Day 5: p.354 #22-26, p. 357 #23-27, p. 360 #24-28

Notes on Assignment:

Chapter 8 Test:

Items on the test:
- Label numbers that are pure imaginary, irrational, rational, complex, and real.
- Graph complex numbers on the complex plane.
- Find the absolute value of a complex number.
- Simplify complex numbers.
- Add, subtract, multiply, and divide complex numbers, including rationalizing denominators.
- Solve quadratic equations that have complex solutions.
- Give the complex number representation and length of a given vector.
- Add vectors graphically.

Pages 353-354:

General notes for this section: Factor the numerator and denominator if possible. (Always look for the greatest common factor first.) Cancel common factors that appear in both the numerator and denominator.

Work to show:
    #1-19: Write the problem down in factored form and show the canceling. Write your final answer as directed in the instructions.
    #22,23,25: Show work as needed.
    #24: Graph
    #26: 5-step word problem

#1-14: Leave your answers in factored form.

#15-19: After you do all of the canceling, multiply out the numerators and denominators so there are no parentheses in your final answer.

#24: Use your knowledge of slope-intercept to graph this on the x-y plane.

#25: The minimum point would be the vertex. Put the equation in standard graphing form by completing the square. From this you can tell what the vertex is. (See section 4.2 if you need a refresher on this.)

#26: Remember that the number is 10t + u.

Pages 355-356:

General notes for this section: Factor the numerators and denominators if possible. Cancel common factors that appear in any numerator and any denominator. (They can be within the same fraction or 2 different fractions.)

Work to show:
  #1-19: Write the problem down in factored form and show the canceling. Write your final answer as directed in the instructions.
  #23-24: Show work as needed.
  #25: Graph
  #26: Long division
  #27: 5-step word problem

#1-18: Leave your answers in factored form.

#19: You will need to refer to page 25 to factor the difference of cubes. Factor the difference of "4th's" by factoring as the difference of squares first.

#23: Simplify the radicals first and then combine like radicals.

#26: This is in section 1.4 if you need to look back.

#27: This is a 5-step word problem.

Pages 359-360:

General notes for this section: To divide by a fraction, we multiply by its reciprocal. Write each problem as multiplication. Then factor the numerator and denominator if possible. Cancel common factors that appear in both the numerator and denominator.

Work to show:
  #1-20: Write the problem down as multiplication. Then factor and show the canceling. Write your final answer as directed in the instructions.
  #24-25, 27: Show work as needed.

#1-20: Leave all of your answers in factored form.

#16-20: Change these complex fractions so that you use the ÷ sign instead of the large division bar. Then change the division to multiplication and continue simplifying as you have done with the other problems.

#25: When solving any quadratic equation, get all of the terms on the same side of the equals sign first. Then try to solve by factoring or the quadratic formula.

#26: A table would be helpful.

#27: See page 25 in section 1.5 on factoring the difference of cubes that you get after you factor out the 2.

#28:   This is an interest bucket problem (5 steps).