

Week 16 Algebra 2 Assignment:

Day 1: p. 319 #1-16 all, 18-26 even

Day 2: p. 322 # 2-12 even, 13-24

Day 3: pp. 324-225 #1-13 all, 14-22 even

Day 4: pp. 330-331 #2-24 even

Day 5: p. 319 #30-34, p. 322 #29-33. p. 325 #29-33, p. 331 #27-31

Notes on Assignment:

Page 319:

Work to show:

#1-20: All of these problems should show at least one level of branching.

#22-24: Show the steps in solving. Do not do these in your head.

#26: Show the branching.

#30-34: Show work.

#1-14: The first step is to split off a $\sqrt{-1}$ from the radical. That turns into an i and the rest of the radical is simplified as you have done in the past.

#9,11,15,16: Break off as many i^4 's that you can, since each equals 1. Or, write one of the factors as i to a power that is a multiple of 4. This also equals 1.

#21-25: When you take the square root of both sides, don't forget the \pm . Simplify the radical as you did the problems in #1-16 above.

#26: Because you cannot assume that the variables are positive, any variable that comes out of the radical with an odd exponent must be put in absolute value brackets.

#33: You can skip this problem.

Page 322:

Work to show:

#2-12: Answers only is ok.

#13: Clear () as you write down the problem on your paper. Finish.

#23-26: Show any work for simplifying first. Then finish.

#29-33: Show work needed.

#8: The imaginary part is the coefficient of i . In this problem, the imaginary part is -6.

#13-22: Treat these the same as you would any binomial. Combine like terms.

#23: Write each complex number in standard form first, and then combine like terms.

#24: Simplify each term first and then see if you can combine them.

#29-33: Use Distributive and/or FOIL.

Pages 324-325:

Work to show:

#1-22: Clear () as you write down the problem on your paper. Finish.

#29-33: Show work.

#1-20: Use either Distributive or FOIL to do the multiplication. Make sure to change any i^2 to a -1 when you simplify. Your answer should be in the form $a + bi$.

#22: You may want to write this down 3 times to cube it.

#29: Remember that if you divide a polynomial by a single term (i.e. monomial), you can write the term under each term of the polynomial. Then simplify.

#30: Simplify the radical and then see if there is anything that you can cancel out of all 3 terms.

#32: Remember to use the conjugate.

Pages 330-331:

Work to show:

#2-12: Show work needed to simplify

#14-24: Write the problem down and then show work.

#27-31: Show work solving quadratics.

#8-10: Simplify the fraction, if possible and then rationalize the denominator.

#12-20: Rationalize all denominators and write answers in the form of $a + bi$.

#22: The reciprocal is $1/4i$. Now rationalize the denominator.

#23: Before flipping this fraction over for the reciprocal, write it as $5 + 2i$ over the common denominator of 3. Then flip it over and rationalize the denominator.

#27-29: Give these a quick look to see if you can see how to factor them. If not, then use the quadratic formula.

#30-31: Remember that the discriminant is the part under the radical in the quadratic formula (i.e. $b^2 - 4ac$). See section 4.5 if you need to review this.