# Week 4 Algebra 1 Assignment:

Day 1: pp. 68-69 #1-25 odd, 28-32 Day 2: p. 73 #1-29 odd, 33-37 Day 3: pp. 78-79 #1-10, 11-23 odd, 29-33 Day 4: pp. 82-83 #1-12, 13-29 odd, 31-39 Day 5: Chapter 2 test

# Notes on Assignment:

### Pages 68-69:

#### Work to show:

#1-17: Write the problem on your paper. Underline the calculation you are going to do, then write the problem again after you have completed the calculation. If there is another calculation to be done, repeat the process. One calculation per line! Here's an example:

$$[20 + (4 \cdot 7)] \div 8$$
  
 $[20 + 28] \div 8$   
 $48 \div 8$   
6

#19-25: Answers only is ok.#28-32: Show any work needed.

- #1-17: Do not just list the answers. Show your work. Remember to follow the order of operations:
  - 1. Grouping symbols (inside to out if you have nested grouping symbols)
  - 2. Exponents
  - 3. Multiplication and division (left to right)
  - 4. Addition and subtraction (left to right)
- #5: The answer to this problem is a fraction. You can leave it as an improper fraction or a mixed number. Just make sure it is simplified.
- #19: You will have to try some different ways of putting the parentheses until you find the one that gives you 21.
- #21-23: When you are told to do something to a sum or difference, make sure you put that sum or difference in parentheses.

# Page 73:

### Work to show:

#1-23: Most of these should be able to be done in a single step.#25-29: Show work.#33-37: Show any work needed.

- #11: If you want to, you can put a 1 in front of the radical (just like you put a 1 in front of a variable with no coefficient) so the problem reads  $-1\sqrt{225}$ . This means find  $\sqrt{225}$  and then multiply it by -1.
- #15-19: Remember that the index of 3 means that you are looking for a number that you would multiply times itself 3 times to get the number underneath.
- #21: Write without the radical. In other words, "what" squared = "what"?
- #23: Write the radical equation that must be true based on this equation.
- #25: Remember that radicals, parentheses, absolute value brackets, and large division bars are always grouping symbols. Do what is inside (or underneath) first.
- #33-37: Work these out, using your order of operations, and then refer back to the list of the sets of numbers in last week's assignment notes and tell which most specific set the number belongs to.

# Pages 78-79:

# Work to show: #1-23: Show any work needed. #29-31: Show factor trees.

#32-33: Show calculations and steps.

- #1-5: Write your answers in set notation, which means enclosed in { }. Remember that U means union (put all the elements together). Intersection, which uses the symbol ∩, is asking what the sets have in common (where do they overlap?). If they have nothing in common, then their intersection is Ø.
- #5: Do what is in each set of ( ) first.
- #6-10: A set can never be "an element of" another set. One of these problems tries to do that.

- #23: If the 2 sets have any elements in common, then your 2 circles will overlap, and the common elements to both sets will be in the overlapped part of the circles.
- #29-31: Do factor trees for these.
- #32-33: Be careful on these and show your work.

# Pages 82-83:

#### Work to show:

#1-12: Answers only.#13-29: Show work.#31-39: Answers only is ok.

#13-29: Show your work!

### Chapter 2 test:

The test is closed-book. No notes, books, or calculators are allowed. Have your parents sign the test and then staple it in half.

For the test:

- Determine the set(s) of numbers that a number belongs to.
- Simplify, multiply, divide, add, and subtract fractions.
- Simply expressions with radicals and absolute value.
- Interpret Venn diagrams, including union and intersection.
- Simplify using the order of operations.