Week 8 Pre-Algebra Assignment:

Day 1: p. 129-130 #3-18 Multiples of 3 (5 steps)
Day 2: pp. 132-133 #1-45 odd
Day 3: Chapter 3 test
Day 4: pp. 139-141: #1-40, 63-71 odd
Day 5: pp. 143-144: #1-14, 21-28, 43-46

Notes on Assignment:

Page 128: (#3-18 Multiples of 3 (5 steps))

Work to show:
All Problems: These are all 5 step problems. Number yours steps.

#6: Let x = the number of acres sold. If the total price is over $60,000 that means the total price is > 60,000. The total price is calculated by taking the number of acres times $4000. Write that expression and then put it > 60,000.

#9: This is a pretty easy problem to solve, but make sure you answer the question being asked. It asks for the smallest integer that works (a single number).

#12: If the average per game is 200 yards, then for 4 games the number of yards would be 4(200) which is 800 yards. In order for the yards to be less than 800, that means that whatever yards are gained in the 4^{th} game, when that number (the unknown) is added to 701, we want that to be less than 800.

#15: For this problem we need to make a couple of assumptions. First, assume that he works a 5-day workweek (Monday through Friday) and that on a normal day he works 8 hours. He may or may not work 8 hours on a holiday. So, first figure out how much he made on Monday through Thursday, working 8-hour days at $13 per hour. You need to add to that what he earns on Friday when he's making twice as much per hour. Since we don't know the number of hours he works, that's our x. If you add his regular pay to his overtime pay the amount is at least $650. That means it equals $650 or is greater than $650. We would say it is ≥ $650.

#18: If he wants to score at least 1000 points, that means 1000 points or more, which translates to wanting ≥ 1000 points. Now think about what you have been told. In the first 2 years he has scored 320 points. He has 2 years left. There are 20 games each year, so that means there are 2(20) = 40 games left. His points in those 2 years will be $40x$ if x is the average scored per game (our unknown). Now add up his total points for all 4 years and make that ≥ 1000.

Pages 132-133: (#1-45 odd)

Work to show:

#1-9: Answers only
#11-19: Write the problem and show each step needed to solve the equation.
#21-25: Use x for the variable.
#27-29: These are 5 step word problems.
#31-33: Show work as needed.
#35-37: Number lines for each problem.
#39-41: Write the problem and show each step needed to solve the inequality.
#43-45: These are 5 step word problems.

#27: You need 2 statements for step 2. Let x = the one you know the least about. The word total here tells you to add the number of beetles to other insects.

#29: You need 2 statements for step 2. Let x = the one you know the least about. You have the tracts given to middle schoolers and the tracts given to high schoolers. In this case we know nothing about how many the middle schoolers were given so let x = this amount.

#43: "At most" means less than or equal to. Your conclusion (step 5) will be a single integer.

Chapter 3 Test:

What's on the test:

- Combine like terms
- Solve equations and inequalities (1 pt. for the process and 1 pt. for the answer)
- Graph an inequality on a number line.
- Translate sentences into math language.
- Two 5-step word problems (steps must be numbered)

Page 139-141: (#1-40, 63-71 odd)

Work to show:

#1-40: Show any work needed. Most will require only answers.
#63-71: Show all steps for solving the equations.

#16-19: Refer to the Divisibility tests listed on page 137 of your book.

#21-25: To make sure you get all of them, write them in pairs and then list all of the factors in order. For example, for the number 24 we have:

1 x 24
2 x 12
3 x 8
4 x 6

List the factors in order: 1, 2, 3, 4, 6, 8, 12, 24

#67: Clear the ( ) first.

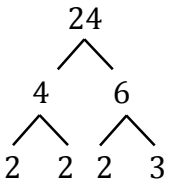
#69-71: Clear the ( ) and then combine like terms before starting undoing anything.

Pages 143-144: (#1-14, 21-28, 43-46)

Work to show:

#1-6: Show calculations neatly.
#7-14: These are all to be done with factor trees.
#21-28: These are all to be done with factor trees.
#43-46: Answers only

General notes for this section: Use factor trees for all of these. Break down your numbers until you cannot break them down any further. Then list your product of factors in order, using exponential notation if a number appears more than once as a factor. (instead of writing $3 \cdot 3 \cdot 5$, write $3^2 \cdot 5$.) Factor trees should look like this:



$2^3 \cdot 3$