Week 18 Pre-Algebra Assignment:

Day 1: pp. 348-349 #1-9 odd, 10-29
Day 2: pp. 353-354 #1-15, 16-32 even
Day 3: pp. 360-361 #1-18, 19-41 odd
Day 4: p. 349 #49-58, p. 354 #40-49, p. 361 #49-58
Day 5: worksheet

Notes on Assignment:

Pages 348-349 (#1-9 odd, 10-29)

Work to show:

#1-17: Answers only
#18-29: One graph with all points labeled on it by letter.

General notes for this section: The first number in the ordered pair is the left-right distance from the origin, and the 2nd number is the up-down distance from the origin.

Pages 353-354 (#1-15, 16-32 even)

Work to show:

#1-9: Two answers for each, given in set brackets
#10-15: Answers only, in set brackets
#16-20: Separate graph for each problem
#22-26: Either an x-y table or ordered pairs in set brackets
#28-32: Write either an x-y table or ordered pairs in set brackets and then also graph each problem on a separate graph.

General notes for this section:

- The domain is the set of all x-coordinates
- The range is the set of all y-coordinates

#7-9: These domains and ranges will be listed as double inequalities since they are not just a few points, but millions of points.

#22-32: You need to put each number of the domain into the equation to find the corresponding range value. In other words, you are given the x-coordinates and your job is to find the y-coordinates.

Pages 360-361 (#1-18, 19-41 odd)

Work to show:

#1-18: Answers only
#19-29: Show calculations
#31-35: Circle map and yes/no answer
#37-41: Show 3 calculations for each problem

#1-6: Look to see if all of the x-coordinates are different. It's ok if the y-coordinates are the same.

#7-12: Each number in the domain circle must have only one arrow coming from it in order to be a function.

#13-18: Do the vertical line test. All it takes is one vertical line crossing more than one point to make it NOT a function.

#19-29: For these problems, work them as follows:

$$\begin{aligned} f(-5) &= -3(-5) + 2 \\ &= 15 + 2 \\ &= 17 \end{aligned}$$

#37-41: In order to find the range, you will have to calculate f(-3), f(2) and f(5) as shown above for #19-29.

Page 349 (#49-58)

Work to show:

#49-53: Show steps in solving
#54-58: Show the branching

Page 354 (#40-49)

Work to show:

#40-44: Show the long division
#45-49: Write the translation and show solving. You can use calculators on these.

#40-44: Divide the numerator (top) by the denominator (bottom). Don't forget to include the negative sign on your answer if it's on the fraction.

Page 361 (#49-58)

Work to show:

#49-53: Answers only
#54-58: Show any work needed

Worksheet

You can use a calculator on this assignment!

#1: Calculate the total bill. This is exactly the kind of skill that you need for everyday life!

#2: Find the value after the first year by subtracting 30% of the original amount. That would be \$8000 – 30% of \$8000, which is \$8000 - \$2400 = \$5600. Then take that amount (\$5600) and increase it by 30% by adding 30% of that amount to it in the same way. You will have 2 different numbers. When finding the % change, remember to take the \$ amount of the change (i.e. the difference between your original amount of \$8000 and your 2nd answer above) and put that over your original amount of \$8000.

#3: This is similar to #2 above, but for this problem you need to calculate the value 5 times, once for the end of each year. If the percent is positive you will add, but if it's negative you will subtract.

#4: How much of the \$30,000 is originally invested in stocks? (Calculate this.)
How much of the \$30,000 is originally invested in gold? (Calculate this.)
Take those 2 dollar amounts and apply the increase or decrease like we did in the other problems. Add those 2 amounts to find the total amount of money they now have saved for college in their college fund. What percent came from gold? To find that, put the dollar value of the gold over that new total in their college account. Do the same for the stocks.

#5: Do this like you did #3 above, but use +10% for each year. To find the % change take the difference of your starting and ending amounts (the starting is \$20,000) and put that over the starting amount of \$20,000.