

Week 20 Pre-Algebra Assignment:

Day 1: pp. 385-386 #1-37 odd

Day 2: p. 367 #44-48 (5 steps), p. 386 #42-51

Day 3: pp. 388-389 #1-37 odd, 45-49 odd

Day 4: pp. 388-389 #2-38 even, 46, 48

Day 5: Chapter 9 test

Notes on Assignment:

Pages 385-386 (#1-37 odd)

Work to show:

#1-7: Answers only

#9-19: Write the inequality, do the substitution, and work it out. Write yes or no.

#21-37: Graphs

Notes for this section: When graphing linear inequalities, follow these steps:

1. Write down the inequality as an equation (with an equal sign instead of the inequality sign). This is your boundary line.
2. Write down whether the boundary is dotted or solid. If there is no equal bar under the inequality, then it is dotted. If there is an equal bar under the inequality, then it is solid.
3. Solve the equation for y so that it is in slope-intercept form and easy to graph. If the equation has no y , (i.e. $x = \#$) then it is a vertical line.
4. Graph the boundary line.
5. Test a point on one side of the boundary line in the original inequality. A good point to use is $(0,0)$ (unless the boundary goes through that point.)
6. Shade the "true" side. Do not shade the "false" side.

9-19: Substitute values in for x and y and work it down to a single number on each side. If the inequality is true, then the point is a solution. If it's false, then the point is not a solution.

#21-37: Follow the instructions and steps listed above.

#33-37: You are to put 2 inequalities on the same graph for each of these.

Page 367 (#44-48)

Work to show:

All Problems: These are 5 step problems. Number the steps.

*** You can use a calculator on these problems.

General notes for this section:

$$\text{slope} = \frac{\text{rise}}{\text{run}} = \frac{y_2 - y_1}{x_2 - x_1}$$

- #44: To get the \$160.50, you had to take the cost of the groceries plus 7% of the cost of the groceries. That would be the same as 107% of the cost of the groceries. So 107% of the cost of the groceries equals \$160.50.
- #45: Remember that to find the percent increase, you take the difference between the amounts and put it over the original amount.
- #46: Translate the first sentence for the equation, putting a variable for the number of students.
- #47: A 30% increase means they have 130% of the sales last year.
- #48: Subtract to find the amount of money paid for the tax. That amount is what percent of \$21.50? (What percent would be where your variable goes.) Remember that the variable will be a percent in decimal form.

Page 386 (#42-51)

Work to show:

#42-47: You may use a calculator for these problems

#48-51: Show all steps.

- #42-44: Remember to round to the nearest quarter.
- #45-47: Check in section 7.6 for the formula for commission.
- #48-52: Clear the () and then solve the equation. Remember that you can combine like terms at any time as long as you stay on the same side of the =.

Pages 388-389 (#1-37 odd, 45-49 odd)

Work to show:

#1-3: Put on the same graph.

#5: Two answers

#7: Four answers

#9: Graph

#11-15: Answer only
#17-23: Show any work needed.
#25: Table and graph
#27-33: Show work
#35-37: Slope-intercept form and graph
#45-49: Graph

Chapter Review – no notes

Pages 388-389 (#2-38 even, 46, 48)

Work to show:

#2-4: Put on the same graph.
#6: Two answers
#8: Four answers
#10: Graph
#12-16: Answer only
#18-24: Show any work needed.
#26: Table and graph
#28-34: Show work
#36-38: Slope-intercept form and graph
#46-48: Graph

Chapter 9 Test

What to know for the test:

- Find domains and ranges of relations
- Represent relations as sets, graphs, and circle maps.
- Find function values using function notation.
- Determine whether relations are functions.
- Find x and y intercepts.
- Put equations in slope-intercept form.
- Find slope.
- Graph lines.
- Graph linear inequalities.