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# Algebra 1

**Please review the FAQs and [contact](#) us if you find a problem.**

Credits: 1

Prerequisite: Pre-algebra

Recommended: 8th, 9th

Test Prep: [PSAT](#), [SAT](#)

Course Description: Students will engage in real world and hands-on problem solving while using their developing skills in algebra. Students will learn new material through animations, videos, reading, and guided practice. The topics covered in this course include: real numbers, algebraic expressions, graphing to solve inequalities and absolute value, graphing to solve linear equations, systems of equations, factoring polynomial equations, relations and functions, quadratic equations, radical and rational expressions and equations, and probability. Students will also do timed PSAT practice questions.

Notes: The text for each lesson is also available in Spanish.

Materials:

- [Basic Supplies List](#) (There are no laptops in this course.)
- tape measure
- patience as several of these resources are slow to load

Day 1\*

If a link is not working, follow the steps on the FAQ page.

1. \*Print out your [first quarter](#) grading sheet or use the [Excel](#) version. Save this sheet and record your scores.
2. Watch the [presentation](#) introducing algebra.
3. Read the topic text. (button in the corner)
4. Do the practice and review. They are both on the link above.
5. Read the [definitions](#) and solve the [crossword puzzle](#).
6. Watch the presentation on “[Why and When](#)” and read the topic text.

Day 2

1. Do all of the available parts of the lesson on [approaching problems](#).
2. Remember that the topic text is always available for reminder, review, help, or to learn the lesson if that is easier for you than the video.

Day 3

1. Do the warm up, presentation, worked examples as necessary and practice for [solving equations](#).

2. Record your score out of 6 for the practice problems. (It will show you your score out of 12. Divide that by 2 to get the points you should record.) You get a point for any you get correct before it shows you the answer.

#### Day 4

1. If you want to move more quickly, DO NOT do the review on the same day as the lesson. The point of putting the review on the next day is to try to force the information into your longer term memory instead of using it only in your short term memory enabling you to easily forget it and leave it behind. If you want to move on, after a review day, you can start the next lesson. You could do the whole thing or just watch the presentation. Then the next day you could use the text and worked examples. You can find what groove works best for you.

2. Do the [review](#) from solving equations.

3. Record your score out of 5.

4. Review as directed if you missed any. Then you may retake the review at this point for a new score. You may add a half point for any newly correct answers if you can correctly solve them now and haven't just cheated.

5. Go through this lesson on [exponents](#) to refresh yourself on the topic.

6. Play [Connect Four](#) with equations. Click on two-step equations. If you aren't sure of how to get the right answers, go back and choose one-step equations to practice easier problems before coming back to two-step equations. (Here's a walk through of [one step equations](#).)

7. Almost every other day is a review day. It gives two days to learn each new lesson. Make sure you get 100% on the lesson before you move on. There will also be another review activity on these days to have more practice on other topics from the course.

8. Early in the course these days will go by quickly because it is probably easy for you.

#### Day 5

1. Do the warm up, presentation, worked examples as necessary and practice for [solving multi-step equations](#).

2. Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

#### Day 6

1. Do the [review](#) from solving multi-step equations.

2. Record your score out of 5.

3. Review as directed if you missed any. Then you may retake the review at this point for a new score. You may add a half point for any newly correct answers if you can correctly solve them now and haven't just cheated.

4. Go through this lesson on [radicals](#) to refresh yourself on the topic. If you need more [help/practice](#)...

5. Do some [equation solving](#).

6. You could get a head start on the next lesson by watching the presentation.

#### Day 7

1. Do the warm up, presentation, worked examples as necessary and practice for [writing expressions and equations](#).

2. Record your score out of 6 for the practice problems. You get a point for any you get

correct before it shows you the answer.

#### Day 8

1. Do the [review](#) from writing expressions and equations.
2. Record your score out of 5.
3. Review as directed if you missed any. Then you may retake the review at this point for a new score. You may add a half point for any newly correct answers if you can correctly solve them now and haven't just cheated.
4. Watch the [Order of Operations](#) video.
5. Try some [problems](#). If you need more of a reminder on how to do it, check it out at [Khan Academy](#).

#### Day 9

1. Do the warm up, presentation, worked examples as necessary and practice for [solving for a specific variable](#).
2. Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

#### Day 10

1. Do the [review](#) from solving for a specific variable.
2. Record your score out of 5.
3. Review as directed if you missed any. Then you may retake the review at this point for a new score. You may add a half point for any newly correct answers if you can correctly solve them now and haven't just cheated.
4. Read the lesson on properties of [addition](#) and do the guided practice. Then check your answers. (right below it)

#### Day 11

1. Do the warm up and presentation for [absolute value](#). Use the worked examples and topic text to help you.
2. Complete the practice.
3. Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

#### Day 12

1. Do the [review](#) from absolute value.
2. Record your score out of 5.
3. Review as directed if you missed any. Then you may retake the review at this point for a new score. I don't need to keep saying it do I? You know the rules? You may add a half point for any newly correct answers if you can correctly solve them now and haven't just cheated.
4. Read the lesson on properties of [multiplication](#) and do the guided practice. Then check your answers.

#### Day 13

1. Do the warm up and presentation for [solving absolute value equations](#). Use the worked examples and topic text to help you.
2. Complete the practice.

3. Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

#### Day 14

1. Do the [review](#) from solving absolute value equations.
2. Record your score out of 5.
3. Review as directed if you missed any. Then you may retake the review at this point for a new score.
4. Read over these [statements of equality](#).
5. Match the [terms and their definitions](#).

#### Day 15

1. Use the tutor simulation to [build a swimming pool](#).

#### Day 16

1. Complete the [project](#). Solve the four problems.
2. Check your [answers](#). (under Day 27)
3. Record 8 points (2 points for completing each problem).

#### Day 17

1. Create a proposal. [Write it](#) or create a presentation like described in the [project assignment](#).
2. Present your proposal. If you wrote a proposal, still present it without reading it.
3. Record 5 points for completion.

#### Day 18

1. Watch the presentation for [inductive patterns](#). Use the worked examples and topic text to help you.
2. Complete the practice.
3. Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

#### Day 19

1. Do the [review](#) from inductive patterns.
2. Record your score out of 5.
3. Review as directed if you missed any. Then you may retake the review at this point for a new score.
4. Play [Absolutely](#). Do the different levels.

#### Day 20

1. Do the warm up and presentation for [representing patterns](#). Use the worked examples and topic text to help you.
2. Complete the practice. (ANSWER CORRECTION: one problem says both charts represent, only chart B represents the equation)
3. Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

#### Day 21

1. Do the [review](#) from solving for representing patterns.
2. Record your score out of 5.
3. Review as directed if you missed any. Then you may retake the review at this point for a new score.
4. Go through this lesson on [radicals](#) to refresh your memory.

#### Day 22

1. Do the warm up and presentation for [representing functions and relations](#). Use the worked examples and topic text to help you.
2. Complete the practice.
3. Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

#### Day 23

1. Do the [review](#) from representing functions and relations.
2. Record your score out of 5.
3. Review as directed if you missed any. Then you may retake the review at this point for a new score.
4. Can you figure out these problems using the [distributive property](#)? Of course you can just use your brain.

#### Day 24

1. Do the warm up and presentation for [domain and range](#). Use the worked examples and topic text to help you.
2. Complete the practice.
3. Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

#### Day 25

1. Do the [review](#) from solving for domain and range.
2. Record your score out of 5.
3. Review as directed if you missed any. Then you may retake the review at this point for a new score.
4. [Simplify](#) some fractions. (Do you need a [video on fractions](#)?)

#### Day 26

1. Do the warm up and presentation for [proportional functions](#). Use the worked examples and topic text to help you.
2. Complete the practice.
3. Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

#### Day 27

1. Do the [review](#) from proportional functions.
2. Record your score out of 5.
3. Review as directed if you missed any. Then you may retake the review at this point for a new score.
4. Find some [equivalent fractions](#). (Do you need a [fraction review video](#)?)

## Day 28

1. Do the warm up and presentation for [linear functions](#). Use the worked examples and topic text to help you.
2. Complete the practice.
3. Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

## Day 29

1. Do the [review](#) from solving for linear functions.
2. Record your score out of 5.
3. Review as directed if you missed any. Then you may retake the review at this point for a new score.
4. Subtract [integers](#).

## Day 30

1. Do the warm up and presentation for [non-linear functions](#). Use the worked examples and topic text to help you.
2. Complete the practice.
3. Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

## Day 31

1. Do the [review](#) from non-linear functions.
2. Record your score out of 5.
3. Review as directed if you missed any. Then you may retake the review at this point for a new score.
4. Multiply and divide [integers](#).

## Day 32

1. Complete the tutor session on [snowboarding](#).

## Day 33 Roller coaster project

1. You will be working on a roller coaster project over the next 4 days.
2. Let's look at a sample [graph](#) for a roller coaster. Looking at this diagram and using what you have learned so far about functions and equations, can you identify which areas of track might be described by proportional, linear, and non-linear functions? (This is NOT asking you to write complicated functions. Can you identify an area that would be proportional? linear? non-linear?)
3. Do this [worksheet](#) to practice using an algebra function to solve a problem. This is also giving you an idea of how to graph a drop section of a roller coaster!
4. You can check your [worksheet answers](#).
5. You can read over and start planning ideas for your [project](#). You will be drawing/designing a roller coaster. You will be using the Dream Scream Machine worksheet to help you write a function for the tallest drop of your roller coaster. You can also look at this [grading rubric](#) to see how it will be graded.

## Day 34

1. Do this [worksheet](#) to practice applying algebra functions to roller coasters. This

worksheet is a further look into functions of the drop portion of a roller coaster. In part 1 you will substitute times into the drop function to find the height at that portion of the drop.

2. You can check your [worksheet answers](#).

3. Read over the project again and start planning your [project](#).

4. Requirements:

- Completed worksheets (demonstrating you understand algebraic functions applied to roller coasters)
- Poster showing your roller coaster (at least two hills and a loop), information about the highest drop, labels showing sections of various function types (proportional, linear, non-linear)
  - Draw out your roller coaster. There needs to be at least two hills (one of which you will be writing a function for the drop) and a loop. You do not need to write functions for the other portions of this roller coaster. You DO need to identify if there are areas that would be linear, non-linear, or proportional.
- Written report. Write a one page paper that answers the questions from the Dream Scream Machine [worksheet](#) and discusses how your roller coaster uses functions. You do not need to know the equations for all the functions your roller coaster uses but you should be able to identify which type of function describes specific sections of track (proportional, linear, non-linear). Include graphs, tables (like the table from the worksheet), and equations (the equation for your highest drop) to support your discussion.
- This grading [rubric](#) will be used to score your presentation.

Day 35

1. Work on your [project](#).

2. Requirements:

- Completed worksheets (demonstrating you understand algebraic functions applied to roller coasters)
- Poster showing your roller coaster (at least two hills and a loop), information about the highest drop, labels showing sections of various function types (proportional, linear, non-linear)
- Written report. Write a one page paper that answers the questions from the worksheet and discusses how your roller coaster uses functions. You do not need to know all the functions your roller coaster uses but you should be able to identify which type of function describes specific sections of track (proportional, linear, non-linear). Include graphs, tables, and equations to support your discussion.
- This grading [rubric](#) will be used to score your presentation.

Day 36

1. Finalize your [project](#) and present it.

2. Requirements:

- Completed worksheets (demonstrating you understand algebraic functions applied to roller coasters)
- Poster showing your roller coaster (at least two hills and a loop), information about the highest drop, labels showing sections of various function types (proportional, linear,

non-linear)

- Written report. Write a one page paper that answers the questions from the worksheet and discusses how your roller coaster uses functions. You do not need to know all the functions your roller coaster uses but you should be able to identify which type of function describes specific sections of track (proportional, linear, non-linear). Include graphs, tables, and equations to support your discussion.
- Use this grading [rubric](#) to score your presentation.

Day 37

1. Do the warm up and presentation for [rate of change and slope](#). Use the worked examples and topic text to help you.
2. Complete the practice.
3. Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

Day 38

1. Do the [review](#) from solving for rate of change and slope.
2. Record your score out of 5.
3. Review as directed if you missed any. Then you may retake the review at this point for a new score.
4. Play “[What Comes Next?](#)” If you start easy, work your way to hard.

Day 39

1. Do the warm up and presentation for [intercepts of linear functions](#). Use the worked examples and topic text to help you.
2. Complete the practice.
3. Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

Day 40

1. Do the [review](#) from solving for intercepts of linear functions.
2. You could take a screen shot of your review exercise and even print out a page of topic text to show what materials you used.
3. Record your score out of 5.
4. Review as directed if you missed any. Then you may retake the review at this point for a new score.
5. Try [writing a few expressions](#). Scroll down to the exercise.

Day 41

1. Do the warm up and presentation for [graphing equations](#) in slope-intercept form. Use the worked examples and topic text to help you.
2. Complete the practice.
3. Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.
4. You can [print graph paper](#) if you would like to use it.
5. You could save some graphs for your portfolio.

Day 42

1. Do the [review](#) from graphing equations.
2. Record your score out of 5.
3. Review as directed if you missed any. Then you may retake the review at this point for a new score.
4. [Graph it](#). Experiment with graphing.

#### Day 43

1. Do the warm up and presentation for [slope form and standard form](#). Use the worked examples and topic text to help you.
2. Complete the practice.
3. Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

#### Day 44

1. Do the [review](#) from solving for slope form and standard form.
2. Record your score out of 5.
3. Review as directed if you missed any. Then you may retake the review at this point for a new score.
4. [Combine](#) like terms.

#### Day 45

1. Do the warm up and presentation for [parallel lines](#). Use the worked examples and topic text to help you.
2. Complete the practice.
3. Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

#### STOP

Time for a report card and portfolio/records updating.

Portfolio/records: In your portfolio you should include a couple of your assignments from this quarter. You could take screen shots of different quizzes/exercises. Keep any written work. Keep your papers neat.

This is how you find your grade: add up all the grades you have been recording for this quarter. Add up your scores and write that number down.

Divide your score by total possible. Move the decimal point over two places to the right. In the next box over, write the number in front of the decimal (something between 1 and 100). This is your percent grade. In the next box over write your letter grade. Anything starting with a 9 is an A. Anything starting with an 8 is a B. Anything starting with a 7 is a C and so forth. If you have everything perfect, then your grade is 100. That's an A too.

Your goal is to get an A for the course at the end of the year. Go back and look at where you lost points. What can you do to avoid losing those points in the next quarter?

#### Day 46(\*)

1. (\*) Print out your next [second quarter grading sheet](#) or use the [Excel](#) version.
2. Do the [review](#) from parallel lines.
3. Record your score out of 5.

4. Review as directed if you missed any. Then you may retake the review at this point for a new score.

5. [Combine](#) like terms.

Day 47

1. Do the warm up and presentation for [perpendicular lines](#). Use the worked examples and topic text to help you.

2. Complete the practice.

3. Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

Day 48

1. Do the [review](#) from solving for perpendicular lines.

2. Record your score out of 5.

3. Review as directed if you missed any. Then you may retake the review at this point for a new score. I hope you are following the rules. You may add a half point for any newly correct answers if you can correctly solve them now and haven't just cheated.

4. Play [Bermuda Triangle](#).

Day 49

1. Complete the [music downloads activity](#).

Day 50-51-52-53

1. Complete the [community service project](#). (You don't actually have to do the project; you just have to plan it, but you could do it!

- You will have a written and oral presentation of your findings

- Read the problem. (There are links for suggestions. They are not working. Here are two of them: [one two](#). You can search online for others, or just come up with your own.

- Read the rubric. You will score up to 8 points, 4 for the written content, and 4 for the oral presentation

- You have four days. Reread the directions and make a list of everything you need to do. Make a plan for how you are going to finish on time. It's okay to get ahead of schedule, but not behind

- Give yourself ten points for completing this assignment on time

- Score the different portions of your project according to the rubric.

- Record your score out of 18.

Day 54

1. Collect five sets of [Fahrenheit and Celsius temperatures](#) from five different locations. (Vary the locations so that you have a wide range of represented temperatures.)

2. Plot them on a [graph](#) with Fahrenheit and Celsius temperatures on the x and y axis.

3. Find the slope of the line.

4. Solve the conversion formula for C.  $^{\circ}\text{C} \times \frac{9}{5} + 32 = ^{\circ}\text{F}$

5. Enter a Fahrenheit temperature into the formula and see if it equals what was given on the site for the Celsius temperature.

6. Do the opposite and start with a Celsius temperature.

7. Record 10 points for completion. If you didn't complete all the parts, go back and

complete it! There's no reason not to!  
8. Work neatly and save this in your portfolio.

#### Day 55

1. Take this [quiz](#).
2. Record your score as extra credit.
3. Complete this [height project](#).
  - Try to get at least 4 girls/women and four boys/men, including yourself.
  - Complete parts 1 and 2.

#### Day 56

1. Complete your height project from Day 55.
  1. Take graph paper and put a project title on it.
  2. Make two tables of data, one for the boys and one for the girls.
  3. Graph the three equations for each set of data. You can make two graphs (one for boys and one for girls) and use different colors for the three different equation lines.
2. Use your graphs to predict the heights of your parents (or other adults you measured). Measure their real heights and see how close they came.
3. Write a paragraph summary of what you did, what seems to be the best equation for predicting height and why.
4. Score up to 5 points for two tables and three equations.
5. Score up to 5 points for your paragraph. Make sure you followed all of the directions.
6. Record your score out of 10.
7. You can include this in your portfolio.

#### Day 57

1. The SAT is a test you'll take in 11th grade. It is required by colleges. You will need a good score to show the college of your choice that you will be a good student. A good score also shows that you've been learning something and not just home playing video games.
2. In 10th grade you can take a practice test called the PSAT. Some schools give full scholarships to students who score very high. That could save your parents \$100,000! So

do your best



3. When you take the PSAT or SAT, you need to know how to play the game. It's a bit of a game and knowing the rules will help you win.
4. You get one point for each correct answer. You get zero points for anything left blank. You lose a quarter of a point if you get one wrong. So it's not a good idea to just guess. If you can eliminate at least one answer, then your odds of guessing the right one increase and statistically speaking, it's in your favor to guess. If you can eliminate two or more of the answers, then you really should guess at the answer. Of course it's best to know the answer!
5. NOTE! As of 2015 the PSAT is eliminating the penalty for a wrong answer. So it is best to guess if you don't know! Don't leave any answers blank.
6. NOTE! As of 2016 the SAT is eliminating the penalty for a wrong answer. That means you should never leave an answer blank. Just guess if you don't know.
7. Try these [PSAT math practice questions](#). There are explanations below.

8. Here's another reason not to cheat. The truth has a way of making itself known. If your PSAT/SAT scores don't match up with your grades, everyone will know something is up. Just copying answers won't help you learn anything and it will eventually show if you aren't learning.

#### Day 58

1. The PSAT and the SAT are also timed tests. You have to stop when time is up. Give it a try.
2. Give yourself twenty minutes to complete this [test](#). Read the directions below before you begin.
3. Get the [timer](#) ready and then begin. If you have time left over, go back and look over your answers to make sure you are happy with them.
4. Don't flip out if you feel like you don't know something. Use your brain. It talks about scatter plots and trend lines. Maybe you have no idea what those are. But look at the question. It says estimate. You know what that is. It has a graph. You can estimate where the "trend" is headed. Look at the answers. Only one is reasonable in relation to the graph.
5. Record your score out of 15. (potential for extra credit)

#### Day 59\*

1. \*Print a [bubble answer sheet](#). Print 5 or 6 to have on hand.
2. Try another set of [PSAT practice questions](#).
3. You may use a [calculator](#).
4. Get the [timer](#) ready for twenty minutes and then begin. If you have time left over, go back and look over your answers to make sure you are happy with them.
5. Check your answers.

#### Day 60\*

1. \*Print a [bubble answer sheet](#) if you don't have one already.
2. Try one more set of [PSAT practice questions](#).
3. You may use a [calculator](#).
4. Get the [timer](#) ready for fifteen minutes and then begin. If you have time left over, go back and look over your answers to make sure you are happy with them.
5. Check your answers.

#### Day 61

1. Do the warm up and presentation for [writing, solving and graphing inequalities in one variable](#). Use the worked examples and topic text to help you.
2. Complete the practice.
3. Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.
4. You can [print graph paper](#) if you would like to use it.

#### Day 62

1. Do the [review](#) from writing, solving and graphing inequalities in one variable.
2. Record your score out of 5.
3. Review as directed if you missed any. Then you may retake the review at this point for a new score.

4. Do “Trick or No Treat.”

Day 63

1. Do the warm up and presentation for [solving and graphing absolute value inequalities](#). Use the worked examples and topic text to help you.
2. Complete the practice.
3. Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

Day 64

1. Do the [review](#) from solving for solving and graphing absolute value inequalities.
2. Record your score out of 5.
3. Review as directed if you missed any. Then you may retake the review at this point for a new score.
4. Practice turning words into mathematical [expressions](#).

Day 65

1. Do the warm up and presentation for [writing and using inequalities](#). Use the worked examples and topic text to help you.
2. Complete the practice.
3. Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

Day 66

1. Do the [review](#) from writing and using inequalities.
2. Record your score out of 5.
3. Review as directed if you missed any. Then you may retake the review at this point for a new score.
4. Go through the lesson on [inequalities](#) and do the practice problems.

Day 67

1. Do the warm up and presentation for [solving and graphing linear inequalities in two variables](#). Use the worked examples and topic text to help you.
2. Complete the practice.
3. Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

Day 68

1. Do the [review](#) for solving and graphing linear inequalities in two variables.
2. Record your score out of 5.
3. Review as directed if you missed any. Then you may retake the review at this point for a new score.
4. Solve the [two example problems](#).
5. Solve these [example problems](#).

Day 69

1. Complete the [skateboarding activity](#).

Day 70-71-72-73

Complete the [Open for Business](#) project.

- 1.You will have a written and an oral presentation of your findings.
- 2.Read the problem. (If the links aren't working, find your own. They aren't necessary.)
- 3.Read the rubric. You will score up to 8 points, 4 for the written content, and 4 for the oral presentation.
- 4.You have four days. Reread the directions and make a list of everything you need to do. Make a plan for how you are going to finish on time. It's okay to get ahead of schedule, but not behind.
- 5.Give yourself ten points for completing this assignment on time.
- 6.Score the different portions of your project according to the rubric.
- 7.Record your score out of 18.

Day 74

- 1.Do the warm up and presentation for [solving systems of linear equations with graphing](#). Use the worked examples and topic text to help you.
- 2.Complete the practice.
- 3.Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.
- 4.You can [print graph paper](#) if you would like to use it.

Day 75

- 1.Do the [review](#) from solving systems of linear equations with graphing.
- 2.Record your score out of 5.
- 3.Review as directed if you missed any. Then you may retake the review at this point for a new score.
- 4.Take the [quiz](#) on solving absolute value equations.
- 5.Record your score out of 5. (1/2 point for each question)
- 6.Here's a video to [review](#) if you need it.

Day 76

- 1.Do the warm up and presentation for [solving systems of equations with substitution](#). Use the worked examples and topic text to help you.
- 2.Complete the practice.
- 3.Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

Day 77

- 1.Do the [review](#) from solving systems of equations with substitution.
- 2.Record your score out of 5.
- 3.Review as directed if you missed any. Then you may retake the review at this point for a new score.
- 4.Take the [slope](#) quiz.
- 5.Score a half a point per problem.
- 6.Record your score out of 5.

Day 78

- 1.Do the warm up and presentation for [solving systems of linear equations by elimination](#). Use the worked examples and topic text to help you.

2. Complete the practice.
3. Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

#### Day 79

1. Do the [review](#) from solving systems of linear equations by elimination.
2. Record your score out of 5.
3. Review as directed if you missed any. Then you may retake the review at this point for a new score.
4. Take the [quiz](#) on solving systems of equations using the elimination method.
5. Keep going until you do four completely correctly. Score a point for each X and Y in those equations that you solved correctly.
6. Record your score out of 8.

#### Day 80

1. Do the warm up and presentation for [rate problems](#). Use the worked examples and topic text to help you.
2. Complete the practice.
3. Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

#### Day 81

1. Do the [review](#) from rate problems.
2. Record your score out of 5.
3. Review as directed if you missed any. Then you may retake the review at this point for a new score.
4. Write three rate word problems and solve them.

#### Day 82

1. Do the warm up and presentation for [mixture problems](#). Use the worked examples and topic text to help you.
2. Complete the practice.
3. Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

#### Day 83

1. Do the [review](#) from mixture problems.
2. Record your score out of 5.
3. Review as directed if you missed any. Then you may retake the review at this point for a new score.
4. Write three mixture word problems and solve them.

#### Day 84

1. Complete the tutor session on [mixing punch](#).

#### Day 85

1. Start the [Say What?](#) project. Read over it today to get an idea of what the project requires.

- 1.You will have a written and an oral presentation of your findings.
- 2.Read the rubric. You will score up to 8 points, 4 for the written content, and 4 for the oral presentation.
- 3.You have four days. Read the directions and make a list of everything you need to do. Make a plan for how you are going to finish on time. It's okay to get ahead of schedule, but not behind.
  - 1.You need to choose the domains/ranges you will use to make a story line. (Problem 1)
  - 2.Decide what the x values represent and what the y values represent. Make up data tables and a graph for your story line. (Problem 2)
  - 3.You can use [this program](#) to create a graph instead of the one suggested in Problem 3. If there are other programs you are more familiar with, you can use those. Excel and similar spreadsheet based programs can create graphs.
  - 4.Problem 4 asks you to find the equation of the lines you have graphed.
  - 5.Write your story line and algebraic question. (This is your opportunity to be creative and maybe even make light of some of the algebra questions you have come across.)
  - 6.Prepare an oral presentation. You will want to have visual aids to present as well, for example, a poster with your graphs.

#### Day 86

- 1.Continue the [Say What?](#) project.
  - 1.Remember, you need:
    - 1.You need to choose the domains/ranges you will use to make a story line. (Problem 1)
    - 2.Decide what the x values represent and what the y values represent. Make up data tables and a graph for your story line. (Problem 2)
    - 3.You can use the program suggested in Problem 3 to create a graph. If there are other programs you are more familiar with, you can use those. Excel and similar spreadsheet based programs can create graphs.
    - 4.Problem 4 asks you to find the equation of the lines you have graphed.
    - 5.Write your story line and algebraic question. (This is your opportunity to be creative and maybe even make light of some of the algebra questions you have come across.)
    - 6.Prepare an oral presentation. You will want to have visual aids to present as well, for example, a poster with your graphs.

#### Day 87

- 1.Continue working on the [Say What?](#) project. It is due tomorrow! Are you on track?
  - 1.You will have a written and an oral presentation of your findings.
  - 2.Read the rubric. You will score up to 8 points, 4 for the written content, and 4 for the oral presentation.
    - 1.You need to choose the domains/ranges you will use to make a story line. (Problem 1)
    - 2.Decide what the x values represent and what the y values represent. Make up data tables and a graph for your story line. (Problem 2)
    - 3.You can use the program suggested in Problem 3 to create a graph. If

there are other programs you are more familiar with, you can use those. Excel and similar spreadsheet based programs can create graphs.

4. Problem 4 asks you to find the equation of the lines you have graphed.
5. Write your story line and algebraic question. (This is your opportunity to be creative and maybe even make light of some of the algebra questions you have come across.)
6. Prepare an oral presentation. You will want to have visual aids to present as well, for example, a poster with your graphs.

#### Day 88

1. The [Say What?](#) project is due today.
2. Score the written content and the oral presentation using the rubric provided in the project. The maximum points for this is 8 points (4 for the written content, and 4 for the oral presentation).
3. Give yourself ten points for completing this assignment on time.
4. Record your score out of 18.

#### Day 89

1. Do these three sets of review exercises. Work to get a perfect score. Use the links to go over the material again if necessary.

- [review](#) from solving and graphing absolute value inequalities
- [review](#) from solving for intercepts of linear functions
- [review](#) from proportional functions

#### Day 90

1. Do these three sets of review exercises. Work to get a perfect score. Use the links to go over the material again if necessary. Topics: Non-linear functions, perpendicular lines, solving and graphing linear inequalities in two variables

- [review](#)
- [review](#)
- [review](#)

#### STOP

Time for a report card and portfolio/records updating.

Portfolio/records: In your portfolio you should include a couple of your assignments from this quarter. You could take screen shots of different quizzes/exercises. Keep any written work. Keep your papers neat.

This is how you find your grade: add up all the grades you have been recording for this quarter. Add up your scores and write that number down.

Divide your score by total possible. Move the decimal point over two places to the right. In the next box over, write the number in front of the decimal (something between 1 and 100). This is your percent grade. In the next box over write your letter grade. Anything starting with a 9 is an A. Anything starting with an 8 is a B. Anything starting with a 7 is a C and so forth. If you have everything perfect, then your grade is 100. That's an A too.

Your goal is to get an A for the course at the end of the year. Go back and look at where you lost points. What can you do to avoid losing those points in the next quarter?

### Day 91(\*)

- 1.(\*)Print out your next [third quarter grading sheet](#) or use the [Excel](#) version.
- 2.Watch the presentation for the [rules of exponents](#). Use the worked examples and topic text to help you.
- 3.Complete the practice.
- 4.Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

### Day 92

- 1.Do the [review](#) from the rules of exponents.
- 2.Record your score out of 5.
- 3.Review as directed if you missed any. Then you may retake the review at this point for a new score.
- 4.Have some more [practice](#).
- 5.Play “[What’s More?](#)” Do all the levels.

### Day 93

- 1.Do the warm up and presentation for [scientific notation](#). Use the worked examples and topic text to help you.
- 2.Complete the practice.
- 3.Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

### Day 94

- 1.Do the [review](#) from scientific notation.
- 2.Record your score out of 5.
- 3.Review as directed if you missed any. Then you may retake the review at this point for a new score. No cheating. Solve each problem completely and correctly for the half point extra.
- 4.Can you do these [scientific notation problems](#)?
- 5.Play [apples and oranges](#). Make sure you play up to the hardest level.

### Day 95

- 1.Do the warm up and presentation for [simplifying expressions with exponents](#). Use the worked examples and topic text to help you.
- 2.Complete the practice.
- 3.Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

### Day 96

- 1.Do the [review](#) from simplifying expressions with exponents.
- 2.Record your score out of 5.
- 3.Review as directed if you missed any. Then you may retake the review at this point for a new score.
- 4.Find the [like term](#).
- 5.Solve the [equations](#) and shoot some hoops.

### Day 97\*

- 1.\*Print out this [worksheet](#) to take notes while watching the video on the [Pythagorean Theorem](#).
- 2.Take the [quiz](#). Do the first ten.
- 3.Record your score out of 10.

#### Day 98

- 1.Do the warm up and presentation for applications of the [Pythagorean Theorem](#). Use the worked examples and topic text to help you.
- 2.Complete the practice.
- 3.Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

#### Day 99

- 1.Do the [review](#) from applications of the Pythagorean Theorem.
- 2.Record your score out of 5.
- 3.Review as directed if you missed any. Then you may retake the review at this point for a new score.
- 4.Play the [inequality game](#). (The question about selling candies has the wrong answer. The game says it is 8. Did you find the right answer? Answer: 29)

#### Day 100

- 1.Do the warm up and presentation for [simplifying radical expressions](#). Use the worked examples and topic text to help you.
- 2.Complete the practice.
- 3.Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

#### Day 101

- 1.Do the [review](#) from simplifying radical expressions.
- 2.Record your score out of 5.
- 3.Review as directed if you missed any. Then you may retake the review at this point for a new score.
- 4.Do the [absolute value inequality problems](#).

#### Day 102

- 1.Do the warm up and presentation for [solving radical equations](#). Use the worked examples and topic text to help you.
- 2.Complete the practice.
- 3.Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

#### Day 103

- 1.Do the [review](#) from solving radical equations.
- 2.Record your score out of 5.
- 3.Review as directed if you missed any. Then you may retake the review at this point for a new score.
- 4.Find the [slope](#). You can choose the time challenge and choose a level. Try the super star level before you stop playing.

#### Day 104

1. Do the warm up and presentation for [applying radical equations](#). Use the worked examples and topic text to help you.
2. Complete the practice.
3. Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

#### Day 105

1. Do the [review](#) from applying radical equations.
2. Record your score out of 5.
3. Review as directed if you missed any. Then you may retake the review at this point for a new score.
4. Play with these [graphs](#) and observe.
5. Now play with the [straight line graph calculator](#).

#### Day 106

1. Do the warm up and presentation for [fractional exponents](#). Use the worked examples and topic text to help you.
2. Complete the practice.
3. Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

#### Day 107

1. Do the [review](#) from fractional exponents.
2. Record your score out of 5.
3. Review as directed if you missed any. Then you may retake the review at this point for a new score.
4. Play [Pythagoras Proof](#).

#### Day 108

1. Complete the tutoring simulation on [calculating miles](#).

#### Day 109 (Materials: tape measure)

1. Select three rectangles to measure. After measuring the length and width of each, use the Pythagorean Theorem to calculate the length of the diagonal. Then measure the actual distance of the diagonal. How accurate were your calculations compared to your measurements?
2. Choose at least two bigger rectangles like a table or door. (Don't just do three books.) Make sure you are able to measure the diagonal. You could use string to measure and then measure the string. (This activity idea is from the NROC course.)
3. Score up to 6 for three measurements and three calculations.
4. Record your score out of 6.

#### Day 110\*

1. \*Print a [bubble answer sheet](#) if you don't have one already.
2. You have 20 minutes to do these PSAT practice problems: [set 1](#) and [set 2](#).
3. Get the [timer](#) ready and then begin.
4. Check your answers.

#### Day 111\*

- 1.\*Print a [bubble answer sheet](#) if you don't have one already.
- 2.You have 20 minutes to do these PSAT practice problems: [set 1](#) and [set 2](#).
- 3.Get the [timer](#) ready and then begin.
- 4.Check your answers.

#### Day 112

- 1.What does mono mean?
- 2.Do the warm up and presentation for [multiplying and dividing monomials](#). Use the worked examples and topic text to help you.
- 3.Complete the practice.
- 4.Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

#### Day 113

- 1.Do the [review](#) from multiplying and dividing monomials.
- 2.Record your score out of 5.
- 3.Review as directed if you missed any. Then you may retake the review at this point for a new score.
- 4.Take the [music challenge](#).

#### Day 114

- 1.Do the warm up and presentation for applications of the [polynomials](#). Use the worked examples and topic text to help you.
- 2.Complete the practice.
- 3.Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

#### Day 115

- 1.Do the [review](#) from applications of the polynomials.
- 2.Record your score out of 5.
- 3.Review as directed if you missed any. Then you may retake the review at this point for a new score.
- 4.Take the quiz on [solving absolute value inequalities](#). Do numbers 1-5.
- 5.Record your score out of 5.
- 6.Here's a video to [review](#) if you need it.

#### Day 116

- 1.Do the warm up and presentation for [adding and subtracting polynomials](#). Use the worked examples and topic text to help you.
- 2.Complete the practice.
- 3.Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

#### Day 117

- 1.Do the [review](#) from adding and subtracting polynomials.
- 2.Record your score out of 5.
- 3.Review as directed if you missed any. Then you may retake the review at this point for

a new score.

4. Take the quiz on [radical expressions](#).

5. Record your score out of 5. (potential for extra credit)

6. Here's a video if you need [review](#).

#### Day 118

1. Do the warm up and presentation for [multiplying polynomials](#). Use the worked examples and topic text to help you.

2. Complete the practice.

3. Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

#### Day 119

1. Do the [review](#) from multiplying polynomials.

2. Record your score out of 5.

3. Review as directed if you missed any. Then you may retake the review at this point for a new score.

4. Play the [exponent game](#).

#### Day 120

1. Do the warm up and presentation for [special products of polynomials](#). Use the worked examples and topic text to help you.

2. Complete the practice.

3. Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

#### Day 121

1. Do the [review](#) from special products of polynomials.

2. Record your score out of 5.

3. Review as directed if you missed any. Then you may retake the review at this point for a new score.

4. Take the quiz on solving radical equations. (This [quiz](#) isn't working now. Sorry about that. They are working on making new quizzes.)

5. Here's a video to [review](#) if you need it.

#### Day 122

1. Complete the tutoring session on [Roman numerals and polynomials](#).

#### Day 123

1. Do the warm up and presentation for [factoring and the distributive property](#). Use the worked examples and topic text to help you.

2. Complete the practice.

3. Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

#### Day 124

1. Do the [review](#) from factoring and the distributive property.

2. Record your score out of 5.

3. Review as directed if you missed any. Then you may retake the review at this point for a new score. You may add a half point for any newly correct answers if you can correctly solve them now and haven't just cheated.
4. Play [polynomial poke](#).

#### Day 125

1. Do the warm up and presentation for [factoring trinomials by grouping 1](#). Use the worked examples and topic text to help you.
2. Complete the practice.
3. Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

#### Day 126

1. Do the [review](#) from factoring trinomials by grouping 1.
2. Record your score out of 5.
3. Review as directed if you missed any. Then you may retake the review at this point for a new score.
4. Simplify the [radicals](#). Do numbers 4-8 and score up to five points for up to five correct answers.
5. Record your score out of 5.
6. Here's a [video](#) if you want review on this.

#### Day 127

1. Do the warm up and presentation for [factoring trinomials by grouping 2](#). Use the worked examples and topic text to help you.
2. Complete the practice.
3. Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

#### Day 128

1. Do the [review](#) from factoring trinomials by grouping 2.
2. Record your score out of 5.
3. Review as directed if you missed any. Then you may retake the review at this point for a new score.
4. Simplify the [radicals](#).
5. Here's a [video](#) if you want review.

#### Day 129

1. Do the warm up and presentation for [factoring by special products](#). Use the worked examples and topic text to help you.
2. Complete the practice.
3. Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

#### Day 130

1. Do the [review](#) from multiplying polynomials.
2. Record your score out of 5.
3. Review as directed if you missed any. Then you may retake the review at this point for

a new score.

4. Take the quiz and [multiply the binomials](#).

5. Record your score out of 5. (1/2 point for each question)

6. Here's a video if you need the [review](#).

#### Day 131

1. Do the warm up and presentation for [solving quadratic equations by factoring](#). Use the worked examples and topic text to help you.

2. Complete the practice.

3. Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

#### Day 132

1. Do the [review](#) from solving quadratic equations by factoring.

2. Record your score out of 5.

3. Review as directed if you missed any. Then you may retake the review at this point for a new score.

4. Play [Match Factors](#).

#### Day 133

1. Complete the [tutoring session](#) on perfecting the long kick in soccer.

#### Day 134

1. You've finished another grading period. Let's do another review. There will be a final exam at the end of the course.

2. Do these three sets of review exercises. Work to get a perfect score. Use the links to go over the material again if necessary.

- [review](#) from solving for linear functions.

- [review](#) from applying radical equations

- [review](#) from applications of the Pythagorean Theorem.

#### Day 135

1. Do these three sets of review exercises. Work to get a perfect score. Use the links to go over the material again if necessary.

- [review](#) from solving for slope form and standard form

- [review](#) from rate problems

- [review](#) from the rules of exponents.

#### STOP

Time for a report card and portfolio/records updating.

Portfolio/records: In your portfolio you should include a couple of your assignments from this quarter. You could take screen shots of different quizzes/exercises. Keep any written work. Keep your papers neat.

This is how you find your grade: add up all the grades you have been recording for this quarter. Add up your scores and write that number down.

Divide your score by total possible. Move the decimal point over two places to the right. In the next box over, write the number in front of the decimal (something between 1 and 100). This is

your percent grade. In the next box over write your letter grade. Anything starting with a 9 is an A. Anything starting with an 8 is a B. Anything starting with a 7 is a C and so forth. If you have everything perfect, then your grade is 100. That's an A too.

Your goal is to get an A for the course at the end of the year. Go back and look at where you lost points. What can you do to avoid losing those points in the next quarter?

Day 136(\*)\*

- 1.(\*)Print out your [fourth quarter grading sheet](#) or use the [Excel](#) version.
- 2.Do the warm up and presentation for [graphing quadratic equations](#). Use the worked examples and topic text to help you.
- 3.\*Do you need more [graph paper](#)?
- 4.Complete the practice.
- 5.Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

Day 137

- 1.Do the [review](#) from graphing quadratic equations.
- 2.Record your score out of 5.
- 3.Review as directed if you missed any. Then you may retake the review at this point for a new score. You may add a half point for any newly correct answers if you can correctly solve them now and haven't just cheated.
- 4.Find the [equation of the line](#). (The slope is rise/run. Say, "Rise over run, we're gonna have fun." 'Cause math is fun like that.)

Day 138

- 1.Do the warm up and presentation for [solving quadratic equations by completing the square](#). Use the worked examples and topic text to help you.
- 2.Complete the practice.
- 3.Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

Day 139

- 1.Do the [review](#) from solving quadratic equations by completing the square.
- 2.Record your score out of 5.
- 3.Review as directed if you missed any. Then you may retake the review at this point for a new score.
- 4.Take the quiz on [factoring the differences of squares](#). Do numbers 1-6 and score up to five points for up to five correct answers. You are NOT going to send me an email with your answer.
- 5.Record your score out of 5.
- 6.Here's a [video](#) if you need review.

Day 140

- 1.Do the warm up and presentation for [solving quadratic equations using the quadratic formula](#). Use the worked examples and topic text to help you.
- 2.Complete the practice.
- 3.Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

#### Day 141

1. Do the [review](#) from solving quadratic equations using the quadratic formula.
2. Record your score out of 5.
3. Review as directed if you missed any. Then you may retake the review at this point for a new score.
4. Take the quiz on [factoring trinomials](#).
5. Score up to five points for up to five correct answers.
6. Record your score out of 5.
7. Here's a [video](#) if you need review.

#### Day 142

1. Do the warm up and presentation for [applications of quadratic functions](#). Use the worked examples and topic text to help you.
2. Complete the practice.
3. Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

#### Day 143

1. Do the [review](#) from applications of quadratic functions.
2. Record your score out of 5.
3. Review as directed if you missed any. Then you may retake the review at this point for a new score.
4. Take the quiz on [factoring perfect square trinomials](#).
5. Record your score out of 5. (1/2 point for each question)
6. Here's a [video](#) if you want review.

#### Day 144

1. Do the warm up and presentation for [systems of non-linear equations](#). Use the worked examples and topic text to help you.
2. Complete the practice.
3. Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

#### Day 145

1. Do the [review](#) from systems of non-linear equations.
2. Record your score out of 5.
3. Review as directed if you missed any. Then you may retake the review at this point for a new score.
4. Take another quiz on [factoring trinomials](#).
5. Record your score out of 5.
6. Here's a [video](#) if you want review.

#### Day 146

1. Complete the tutoring session on [rocket trajectory](#).
2. [Video](#) break.

#### Day 147

1. Do the warm up and presentation for [simplifying rational expressions](#). Use the worked

examples and topic text to help you.

2. Complete the practice.

3. Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

#### Day 148

1. Do the [review](#) from simplifying rational expressions.

2. Record your score out of 5.

3. Review as directed if you missed any. Then you may retake the review at this point for a new score. You may add a half point for any newly correct answers if you can correctly solve them now and haven't just cheated.

4. Play [Shape Shifter](#)

#### Day 149

1. Do the warm up and presentation for [multiplying and dividing rational expressions](#). Use the worked examples and topic text to help you.

2. Complete the practice.

3. Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

#### Day 150

1. Do the [review](#) from multiplying and dividing rational expressions.

2. Record your score out of 5.

3. Review as directed if you missed any. Then you may retake the review at this point for a new score.

4. Take the quiz on the [quadratic formula](#). Start over if necessary to keep going. Score up to five points.

5. Record your score out of 5.

6. Here's a [video](#) if you want review.

#### Day 151

1. Do the warm up and presentation for [adding and subtracting rational expressions](#). Use the worked examples and topic text to help you.

2. Complete the practice.

3. Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

#### Day 152

1. Do the [review](#) from adding and subtracting rational expressions.

2. Record your score out of 5.

3. Review as directed if you missed any. Then you may retake the review at this point for a new score.

4. Take the quiz on [parabolas](#).

5. Record your score out of 5. (1/2 point for each question)

6. Here's a [video](#) if you want review.

#### Day 153

1. Do the warm up and presentation for [solving rational equations](#). Use the worked

examples and topic text to help you.

2. Complete the practice.

3. Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

#### Day 154

1. Do the [review](#) from solving rational equations.

2. Record your score out of 5.

3. Review as directed if you missed any. Then you may retake the review at this point for a new score.

4. Take the quiz on [completing the square](#).

5. Score up to five points for up to five correct answers.

6. Record your score out of 5.

7. Here's a [video](#) if you want review

#### Day 155

1. Do the warm up and presentation for [applying rational expressions](#). Use the worked examples and topic text to help you.

2. Complete the practice.

3. Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

#### Day 156

1. Do the [review](#) from applying rational expressions.

2. Record your score out of 5.

3. Review as directed if you missed any. Then you may retake the review at this point for a new score.

4. Solve the [radicals](#).

#### Day 157

1. Complete the tutoring session on [conserving water](#).

#### Day 158

1. Do the warm up and presentation for [number sets](#). Use the worked examples and topic text to help you.

2. Complete the practice.

3. Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

#### Day 159

1. Do the [review](#) from number sets.

2. Record your score out of 5.

3. Review as directed if you missed any. Then you may retake the review at this point for a new score. You may add a half point for any newly correct answers if you can correctly solve them now and haven't just cheated.

4. Play "[We Can Work It Out](#)." (From NROC algebra course: If it takes Bob 3 hours to paint a room and it takes Jeff 5 hours to paint the same room, how many hours would it take if the two painters work together? Many students will attempt to take an average

and come up with an answer of 4 hours, but 4 hours doesn't make sense. Why would it take longer than Bob working alone? Surely the two painters would complete the room in less than 3 hours. Using the algebra work model, we discover that the room should be painted in slightly less than two hours.)

#### Day 160

1. Do the warm up and presentation for [understanding logical statements](#). Use the worked examples and topic text to help you.
2. Complete the practice.
3. Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

#### Day 161

1. Do the [review](#) from understanding logical statements.
2. Record your score out of 5.
3. Review as directed if you missed any. Then you may retake the review at this point for a new score.
4. Take a look at the [diagram](#) on this page. Make sense of it.  You can read the page and the examples if you need help understanding it.

#### Day 162

1. Do the warm up and presentation for [inductive reasoning](#). Use the worked examples and topic text to help you.
2. Complete the practice.
3. Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

#### Day 163

1. Do the [review](#) from inductive reasoning.
2. Record your score out of 5.
3. Review as directed if you missed any. Then you may retake the review at this point for a new score.
4. Take the [quiz](#) on the properties of numbers. No grade.

#### Day 164

1. Do the warm up and presentation for [deductive reasoning](#). Use the worked examples and topic text to help you.
2. Complete the practice.
3. Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

#### Day 165

1. Do the [review](#) from deductive reasoning.
2. Record your score out of 5.
3. Review as directed if you missed any. Then you may retake the review at this point for a new score.

#### Day 166

1. Do the warm up and presentation for [events and outcomes](#). Use the worked examples and topic text to help you.
2. Complete the practice.
3. Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

#### Day 167

1. Do the [review](#) from events and outcomes.
2. Record your score out of 5.
3. Review as directed if you missed any. Then you may retake the review at this point for a new score.
4. Play [Bargain Time](#).

#### Day 168

1. Do the warm up and presentation for [probability of independent events](#). Use the worked examples and topic text to help you.
2. Complete the practice.
3. Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

#### Day 169

1. Do the [review](#) from probability of independent events.
2. Record your score out of 5.
3. Review as directed if you missed any. Then you may retake the review at this point for a new score.
4. Play [Probability Fair](#).

#### Day 170

1. Do the warm up and presentation for [permutations and combinations](#). Use the worked examples and topic text to help you.
2. Complete the practice.
3. Record your score out of 6 for the practice problems. You get a point for any you get correct before it shows you the answer.

#### Day 171

1. Do the [review](#) from permutations and combinations.
2. Record your score out of 5.
3. Review as directed if you missed any. Then you may retake the review at this point for a new score.
4. Your final will be on Day 180. Here's a [study packet](#) for you. It covers a few things we didn't, so don't worry about those. Don't worry about those. Also, probability will not be on your final.

#### Day 172

1. Do the warm up and presentation for [probability of dependent events](#). Use the worked examples and topic text to help you.
2. Complete the practice.
3. Record your score out of 6 for the practice problems. You get a point for any you get

correct before it shows you the answer.

Day 173

1. Do the [review](#) from probability of dependent events.
2. Record your score out of 5.
3. Review as directed if you missed any. Then you may retake the review at this point for a new score.
4. Keep reviewing for the final.

Day 174

1. Complete the tutoring session on [probability game design](#).

Day 175(\*)

1. I think that this [video](#) will provide a good review of functions and relations.
2. \*You can take [notes](#) on this worksheet as you watch.
3. Take the [quiz](#). No grade.

Day 176

1. You can use this [test](#) as an example of your final. Only work on problems through number 42. The answers are at the end.

Day 177

1. This is a good place for [review](#). You can try the problems on the worksheets and then watch the videos if necessary in order to see the answers, or try the quizzes if you think you got it.

Day 178

1. You've got videos, a study packet and all the resources in this course. Study!

Day 179

1. You've got videos, a study packet and all the resources in this course. Study!

Day 180\*

1. \*Print your [answer sheet](#).
2. Take your [final exam](#). Do through number 45.
3. Check your [answers](#).
4. Add 5 points to your score.
5. Record your score out of 50.
6. You can include this test in your portfolio.
7. Figure your course grade. Enter on your fourth quarter grading sheet your total score for each quarter. Divide by the total score from all four quarters. That can be your grade, but I also think you can award up to half of the grade for completing the daily assignments. Then you would take the grade you just calculated, divide it in half and add it to 50, or whatever grade you deem appropriate. Example of the scoring calculation:
  - four quarters total:  $126 + 115 + 110 + 233 = 584$  (sample numbers, not reflective of this course)
  - dividing by total possible  $584 / 669 = .87 * 100 = 87\%$
  - dividing in half for being worth half the grade:  $44\%$

- 100% completion of daily assignments, readings, homework, etc.
- Half of that 100% for being worth half of the final grade: 50%
- Final grade would be:  $50 + 44 = 94\%$ , A

Summer School: If you want to practice for the [PSATs](#), here is one place to do it.