

### Unit 3 Study Guide/Plan:

Your Unit 3 exam is coming up. My form of a study guide is designed to help you figure out what topics are important and to actually study and prepare for the test by focusing on the work you have done, the skills you have been building and the skills you still need to work on. I do not give a study guide that looks similar to your test. If you have been doing your classwork, setting up your notes, watching the videos and completing your homework like I have been coaching you to complete it (all problems/original question written, all work shown), summarizing etc. your best study guide is your own notebook. If you have not been doing that, think about what you can do to improve for the next unit!

Here is what you should have done, or should do to prepare:

- Complete all homework.
- Review your classwork that has been done and make sure you summarized your learning.
- Review your homework that's been done and make a list of questions/problems you still don't understand. Ask myself or a peer for help, or google the topic on your own and watch some videos or read up on one of the myriad magical math websites out there for help. Try similar problems for additional practice.
- Complete Chapter 1 and 2 Closure Problems, as well as the Ch 3 closure problems--I will not check it (you should, answers are included in the table in the chapter) but it will benefit you GREATLY to do them. When you check them, if you get a problem wrong, there is extra help and practice listed in the answer table. Go and try those problems or use the help that is listed.
- Complete Checkpoint 1, 2 and 3.
- Watch every required video that you have not yet watched. Go back and refresh on any topics you don't feel confident in by watching the video again/taking notes.
- Work with a peer to study or get help!
- Come to the test review session that will be posted on our calendar and hosted at Lunch and Packtime with any questions that you might have.
- Create a Study Guide sheet. It may be a maximum size of 8.5" x 11", front and back with NO oragami or fold outs!

### Topics that may be on your Unit 3 Exams:

- Functions: function notation, function machines, Domain/Range and what makes a function a function (Ch 1)
- solving multi-step linear equations for x and showing the check (Checkpoint 1)
- Describing a graph or function completely (Learning Log 1-32)
- Order of Operations/Rational Expressions (Checkpoint 2)
- Squares/square root, cubes/cube roots (perfect squares and perfect cubes) (Ch 1 and 2)
- Absolute Value and solving equations with Absolute Value (Ch 1, 2 and 3)
- Find the slope, y-intercept and equation of a line from a graph, table, situation or equation (Ch 2)
- Represent a line or linear function in any form (table, graph, equation, situation) (Ch 2, Thanksgiving Packet)
- Identify negative slopes (Ch 2, Thanksgiving Packet)
- Find the equation of a line in slope intercept form given two points or the slope and a point (must find slope then "b" then find equation  $y=mx+b$ ) (Ch 2, Thanksgiving Packet)
- Real-world interpretation of slope and y-intercept and a linear situation (Ch 2, Thanksgiving Packet)

- Exponents--simplify using the laws of exponents, including negative exponents and the power of 0. (Ch 3, Winter Break Packet)
- Scientific Notation--converting standard form numbers into scientific notation and from scientific notation to standard form. (Ch 3)
- Solving equations with distributive property (Ch 3)
- Solving equations with absolute value (Ch 3)
- Solving equations with products (multiplying two binomials) and using FOIL/Double Distribution/Box/Generic Rectangles (Ch 3)

Good Luck!