Dr. O's Rules of Thumb Collected from 2013 Fall through 2015 Fall

General Rules of Thumb

- 1. When Dr. Otts is trying to help me, I WILL let him!
- 2. When Dr. Otts promises to tell me something later, I need to hold him to it.
- 3. College is a full time job when you're attending full time (12 or more hours per semester).
- 4. There is a difference between being physically present and being attentively present.
- 5. Whatever course you're taking or job you have, the most important thing you can do is learn the vocabulary earlier rather than later.
- 6. Don't cause others to wait on you by being late to class or meetings; don't step out and back—in during the meeting; don't leave before the ending time. You DO miss something important.
- 7. Finish with your cell phone BEFORE you enter the classroom.
- 8. Anything you turn in for credit needs to have your name on it. If not, it gets thrown away. Why?
- 9. If it's shown on the screen, repeated, or given in a handout, it's important and you'll see it again.
- 10. You learn the best way for you to accomplish a task by first, accomplish the task; then, second, reflect on the process you used: ask questions about how you did it, what was effective, what was a dead end, and how you could improve.
- 11. Always have a backup plan.
- 12. Get in the habit of doing things the way they are meant to be done.
- 13. If it helps, do it; if it doesn't help, don't do it.
- 14. When you mess up, fess up, fix it, and learn from it.
- 15. When you do it right it works better, so you tend to have better results.
- 16. If something is worth doing, is it not worth doing well?
- 17. The better you prepare, the easier it is to perform well.
- 18. You are known by what you do; so, when you put your name on something, what are you telling people?
- 19. Think first, think again, then speak.
- 20. Your actions show what is important to you.
- **21.** When your actions show that something is not important to you, why should anyone else think that it is important?
- 22. Little things matter, such as being on time, filling out forms correctly, having your work ready, and saying "please" and "thank you."
- 23. When you share with others (friends, family, colleagues, classmates), the results are always positive: the task is lessened and the rewards are multiplied.
- 24. When you let selfishness rule your thoughts and actions, the results are always negative.
- **25.** Steps are never skipped, whether in tasks or on stairs. The same work must still be done.
- 26. Well organized notes and well organized thoughts lead to better retention and understanding.

- 27. Life is a never–ending series of applications (math speak for word problems, work speak for opportunities). Become proficient at problem solving.
- 28. When solving a problem, know where to start AND where to stop.
- 29. Read the directions FIRST; then follow them.
- 30. Different does not mean wrong.
- 31. When you know what to do and how to do it, then JUST DO IT.
- 32. Answer the question that is asked. Do NOT assume.
- 33. Be sure that you understand what question is being asked.
- 34. As a habit of success, do what is actually meant.
- 35. The more you know about how to perform a task, the easier it is to get the correct result.
- 36. On a multiple-choice test with four answer choices, don't pick E.
- 37. Things are only as hard as they are. Don't make them harder or easier than they have to be.
- 38. When you come back after missing a class, don't even try to ask the professor if you missed something important! ALWAYS consult your Class Buddies first.
- 39. Read problems all the way through before you ask questions: listen, think, and filter before speaking.
- 40. It is easier to take a grade down than to bring a grade up.
- 41. It is easier to lower a GPA than to bring it up.
- 42. We learn new information better inductively, and we use what we've learned better deductively.
- 43. Concentrate on what you can control. DO NOT waste time on what you cannot control.
- 44. Your ears work better when your eyes are open and your mouth is closed.
- 45. To compete successfully, you MUST cooperate (collaborate) successfully.
- 46. Do NOT put words in Dr. O's mouth (or anyone else's).
- 47. We are slaves to our habits; therefore, we need to make sure we have good habits.
- 48. We eat a watermelon by cutting it into pieces, then eating a piece one bite at a time. We solve big problems the same way.
- 49. Thinking about a task before you begin, while you are working, and after you have completed it is an excellent habit when you learn from it and act upon what you learn.
- 50. Come to class with questions, leave with answers. ALERT: Answers generally lead to more questions.
- 51. Never let someone else take your happy face. (9/21/2015: C. Anderson)

Math Rules of Thumb

- 1. It doesn't matter how fast Dr. O wants to go, what matters is that I understand. I will ask questions when I need to because it matters that I understand.
- 2. There is a difference between being physically present in class and being attentively participating in class.

- 3. If it's shown on the screen, repeated, or given in a handout, its important and you'll see it again.
- 4. Anything you turn in for credit needs to have your name on it. If not, it gets thrown away.
- 5. Minus a negative means plus a positive.
- 6. Always pick on the smaller variable term when gathering variable terms on the same side of the equation.
- 7. Simply fractions before you multiply.
- 8. If it helps, do it; if it doesn't help, don't do it. The last step in solving a linear equation is to multiply both sides by the reciprocal of the coefficient.
- 9. In inequalities, horizontal lines (greater than or equal to or less than or equal to) call for horizontal lines: [or].
- 10. A negative numbers are always smaller than a positive number, but when both numbers are negative, the smaller number has the greater absolute value.
- 11. It doesn't matter how fast Dr. O wants to go, what matters is that I understand. I will ask questions when I need to because it matters that I understand.
- 12. When you multiply or divide 2 numbers with the same signs, the results are always positive.
- 13. When you multiply or divide 2 numbers with the opposite signs, the results are always negative.
- 14. When the run (bottom of slope fraction) is 0, the slope is **undefined** and the line is vertical.
- 15. When the rise (top of slope fraction) is 0, the slope is zero and the line is horizontal.
- 16. An intersection generally produces a set smaller than either original while a union usually produces a set larger than either original set.
- 17. In similar triangles when you're looking for length of a side, put the variable on top.
- 18. When you put the *x* on top, the other number from the same triangle goes on top of the fraction on the other side of the equals sign.
- 19. Calculator batteries ALWAYS die at the worst time. Bring extra!
- 20. Take care of the sign first, then everything else will be easier.
- 21. Only circle one choice for each item on the test.
- 22. Guys: Don't forget to read the directions FIRST. Everyone: Follow the directions once you've read them.
- 23. The inequality sign always points to the smaller number.
- 24. To divide by a fraction, flip it then multiply.
- 25. The negative sign goes with the number immediately following it.
- 26. In a find the length of a ladder problem, the ladder is always the hypotenuse.
- 27. Read the entire item on a test: Directions, question, and ALL answer choices.
- 28. Answer the question that is asked. Do NOT assume.
- 29. Be sure that you understand what question is being asked.
- 30. On a multiple-choice test with four answer choices, don't pick E.
- 31. If you don't have any parts, you don't have anything (when the top number in a fraction is 0, then the whole fraction is 0).
- 32. If you draw a vertical line through a graph and it hits more than once, then it is not the graph of a function.

- 33. If you are good with the parentheses, then the parentheses will be good to you.
- 34. When using your calculator, check twice before pushing ENTER.
- 35. Read problems all the way through before you ask questions; listen, think, and filter before speaking.
- 36. It is easier to take a grade down than to bring a grade up.
- 37. It is easier to lower a GPA than to bring it up.
- 38. We learn better inductively, and we apply better deductively.
- 39. Your ears work better when your eyes are open and your mouth is closed.
- 40. To compete successfully, you MUST cooperate successfully.
- 41. Do NOT put words in Dr. O's mouth (or anyone else's).