MTH 098 – Test #2

(Thursday March 15th → 12:30 – 1:20 pm)

Expect to see questions like:

- Solve linear equations containing one variable and be prepared to show the operation(s) that you are performing on both sides of the equation
  - Class Practice on Equation Solving #1 & #2
  - Page 130: 11 – 19, 27, 29, 33, 57 (These are all conditional equations.)

- Determine whether a linear equation containing one variable is a conditional equation, an identity, or a contradiction and be able to explain how you know
  - Class Practice on Equation Solving #3
  - Page 131: 31, 35, 37, 39, 47, 49, 51, 53, 55, 61, 63 (These are a mixture of conditional equations, identities, and contradictions.)

- Solve a formula for a variable
  - Class Practice on Formulas #1 & #2
  - Page 141: 45 – 55

- Solve inequalities containing one variable and also to show the solution on a number line
  - Class Practice on Inequalities
  - Page 161: 11 – 29, 33, 35, 41, 49, 55

- Graph linear equations by point plotting
  - Class Practice on Graphing #1 & #2
  - Page 418: 25 – 37, 41, 43

- Graph linear equations by using the x and y intercepts
  - Class Practice on Graphing #3 & #4
  - Page 418: 45 – 55

- Graph horizontal and vertical lines and comment on their slopes
  - Class Practice on Graphing #5
  - Page 418: 21, 23, 65, 67

- Find the slope of a line if you are given two points on the line
  - Class Practice on Slope #1
  - Page 427: 11 – 21, 25, 27, 29

- Be able to determine whether two straight lines are parallel, perpendicular, or neither.
  - Class Practice on Slope Exercises
  - Class Practice on Additional Exercises on Slope
  - Page 428: 49 – 55

- Graph linear equations by using the method of slope-intercept (y = mx + b) and be able to show where the rise and run are on the graph
  - Class Practices on Graphing #8 and #9
  - Page 439: 9, 11, 13, 15, 19
• Determine the solution to a system of equations by graphing both equations on the same set of axes and then determining the coordinates of the point of intersection
  o Class Practices on Systems of Equations #1 and #2
  o Page 471: 37, 39, 41, 43, 47
• Be familiar with the three diagrams on page 465 and able to identify a consistent system of equations, an inconsistent system of equations, and a dependent system of equations
  o Page 470: 17, 19, 21, 23

Possible Bonus

• Determine the solution to a system of equations by using the method of substitution ➔ see Class Practices on Systems of Equation #3 and #4 and Page 477: 5, 7, 11, 13, 15, 29
• Determine the solution to a system of equations by using the method of elimination (addition) ➔ see Class Practices on Systems of Equations #5 and #6 and Page 485: 5, 7, 9, 13, 19, 23