Pre-Calculus 30 Review for Chapters 1 & 2

- Practice questions: P 56 #1, 2, 6, 7, 8, 9, 10, 11, 12, 15, 16
  P 59 #9, 11
  P 99 #2, 3, 4, 7
  P 101 #16 (do algebraically)

- I will be asking for you to hand these review questions in so that I can make a note on how many of the questions that you did and showed work for. This will be put on powerschool. It will not be part of the Foundational Assignment Category but there will be a correlation to your success on this test and to any future considerations in terms of me being able to support your success in this class.

- THINGS TO WATCH OUT FOR:
  - Confusing what the value of "b" is in the equation and the fact that everything outside the equation (including the description) is always $\frac{1}{b}$
  - Making sure that you check to see if the "b" value is factored out
  - Don't forget to use the opposite sign for h
  - Using the correct language: vertical translation of ____ units, horizontal translation of ____ units, vertical stretch by a factor of _____, horizontal stretch by a factor of _____
  - Remembering what the basic graphs of $y = x^2$, $y = |x|$, $y = \sqrt{x}$ look like and where there specific points are on the graph
  - Remembering the mapping notation $(x, y) \rightarrow \left(\frac{1}{b}x + h, ay + k\right)$
  - Remembering the method to determine h and k in questions with stretch:
    $\frac{1}{b}x_1 + h = x_2, \quad ay_1 + k = y_2$
  - Remember the difference between an equation in the form g(x) = af(b(x – h)) + k and the equation of b in its actual form. In its actual form there will be no "f" but there will be mathematical operators such as $\sqrt{\ }$, $|\ |$, ^{2} etc
  - Remember how graph an inverse relation
  - Remember how to find invariant points
  - Remember how to find the equation of $f^{-1}(x)$
  - Remember how to find the domain, range and restrictions of all functions