ALGEBRA FOR CALCULUS Stretch II Topics List for Exam 1

*.*

**Section 2.3 Composition of Functions**

* Given two functions defined by formulas, find their composition and also the domain of their composition
* Decompsoe a function as a composition of two functions

**Section 2.4 Symmetry and Transformations**

* Know the Basic Graphs of some basic functions, all seven on page 194
* Determine visually whether a graph is symmetric with respect to the *x-*axis, *y-*axis, and/or the origin. (# 1 – 6 p. 206)
* Perform the algebraic tests to determine symmetries of a function. (#15 - 26 p. 206)
* Given the graph of a funciton, determine visually whether the function is even, odd, or neither. (#33-38, p. 206)
* Perform the algebraic test to determine whether a function is even, odd, or neither. (#39 - 48

pp. 206-07)

* Translations of graphs: problems like 49 – 84 on p. 207; also write a function like # 97 - 106; also translations like 107 – 118.
* Given graph of f(x) find a formula of a graph that has been transormed (see #129 p. 209)
* Visualize the graph 1 -9 on page 205
* Know the summary of transformations of y = f(x) on page 204

**MyLabsPlus has a set of practice HW problems (under the “homework” tab) and a practice exam (under the “Test and Quizzes” tab). The more problems you do, the better prepared you will be! Also, working through the MLP practice exam will simulate the time pressure of the real thing. Study hard!**