**Unit 1: Piecewise Functions**

Objective 2.02 Use piece-wise defined functions to model and solve problems; justify results.

a) Solve using tables, graphs and algebraic properties.

b) Interpret the constants, coefficients, and bases in context of the problem.

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| **DAY** | **TOPIC** | **ACTIVITY** | **HOMEWORK**  **(subject to change)** |
| **1**  Wed, 1/22 | Function: yes/no  Looking at and sketching different graphs of functions to find domain/range and where the graph is increasing/decreasing  Interval notation |  | p. 228-229 #1-3, 5-10 (for #7 and 10, also give intervals where incr, decr, and constant) |
| **2**  Thurs, 1/23 | Domains of functions without looking at the graph  Evaluating Functions |  | Practice sheet |
| **3**  Fri, 1/24 | More domain without graph review  Intro to Parent Functions |  | p. 217-218 #14, 17, 18, 22, 25, 29, 35-52 all - NO CALCULATORS |
| **4**  Mon, 1/27 | Transformations | **Quiz** (days 1-3)  Mini-project: Explore transformations | Transformation sheet |
| **5**  Tuesday,  1/28 | Transformations without calculators continued | Practice sheet | p. 256 #1-9 odd, 17-31 odd |
| **6**  Wednesday, 1/29 | Review and start piecewise functions (evaluating and graphing) | **Quiz on transformations**  Class notes worksheet | p. 217 #21-24, 59-71 odd, 72 |
| **7**  Thursday,  1/30 | Intro to Piecewise functions Applications of piecewise functions | Class notes worksheet | Practice sheet |
| **8**  Fri, 1/31 | Step Functions and Applications of piecewise functions continued |  | Practice sheet |
| **9**  Mon, 2/3 | Review | Study Guide wkst | Want extra practice?  P. 290-293 #1, 3, 7-12, 21, 23, 29-32, 53 |
| **10**  Tues, 2/4 | **Test** | **Test** |  |