## Precalculus Assignments Study Guide Chapter 2: Functions and Their Graphs

- 1. (2.1) Functions -p 69-70; 19,23,29,31,35,39,43,47,51,55,59,63,69,71,75,79,87
  - a) Find the domain & range & determine whether they represent function. p69,19,23,29
  - b) Determine whether equations define functions. p69,31,35,39
  - c) Find the values of the functions, p 6943,47
  - d) Find the domain of the function defined by an equation. p 69, 51,55,59,63
  - e) Form the sum, difference, product, and quotient of two functions, p 69, 67, 69, 71,75
  - f) Find the difference quotients p 69; 79,87
- 2. Relations and functions (1.1) Resources: p2 ,1-10
- 3. (2.2) The graph of a function p6-77; 11 a-j,13,17,21,25
  - a) Obtain information from or about the graph p76,11 a-j
  - b) Identify the graph of a function. P77,13,17,21, 25
- 4. Composition of functions (1.2) Resource p5, 1-12

- 5. (2.3) Properties of functions p 90-91;13,14,17, 19,21,23, 37, 41, 45, 47, 65
  - a) Use the graphs to determine where the functions are increasing or decreasing, or constant p 90, 13,15,17.
  - b) Use the graph to locate the maxima and minima. p90, 19,21,23
  - c) Identify even and odd functionsp91,37, 39, 41, 45,47, 49.
- 6.(2.4) Library of functions: Piecewise-defined Functions p102-103,11,15,19,23,27,29,31,34,37,40,43,47

Graph functions, p102, 11,15,19,23,

- a) Evaluate piecewise-defined functions p 103, 27,29,31,34,37,40,43,45
- 6. Piecewise Functions (1.7) p. 20, 1-7

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- 7. (1.1)p13-16;15,17,35,39, -45 odd,51-65 odd, 71,75, 79,83,87,
- a) Plot points in rectangular coordinate system p13, 15,17,

- b) Us the distance & midpoint formula, p14,35, 39-45 odd,51-65 odd
- c) Find the intercepts from the graph. p15,71,75
- d) Graph equations by plotting points. P16, 79,83,87
- 7. Graphing Linear Equations (1,3) Resources p 8; 1-7
- 8. Lines (1.4) Lines, p 40-42, 14,17,21,25,29,33,36,39,43,47-69odd, 73,78,93,97, 105
- 9. Writing Linear equations (1.4) Resources, p.11, 1-11
- 10. (1.5) Circles p.50

9,14,17,21,23,26,29,32,35,37,39,41,43

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Chapter 3: Linear and Quadratic Functions

- 11.(3.1) p137-139;13,17,21,25,29
- 12. Modeling Real -World Data with Functions (1.6) resources p 17. 1-2
- 13. (3.2) Building Linear Models from Data p 144-145, 5-15 odd
- 14.(3.3) Quadratic Functions and their properties p156-158, 13,17,21,25,29,33,37,41,45,49,52, 55, 59, 63, 67, 71
- 15. (3.5) Inequalities Involving Quadratic functions p. 172 -173, 3-33 odd.

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